DOCUMENT RESUME

ED 122 165	95	CE 007 288

AUTHOR	Gilmartin, Kevin J., Ed.
TITLE	Career Education in the Public Schools, 1974-75: A National Survey.
INSTITUTION	American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.
SPONS AGENCY	National Advisory Council for Career Education, Washington, D.C.; Office of Education (DHEW), Washington, D.C.
PUB DATE	May 76
CONTRACT	300-750-245
NOTE	335p.; Not available in hard copy because tabular matcrial, the survey forms, the materials evaluation instrument, and the materials survey assessors' manual will not reproduce well due to the small size of type in the original
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Career Education; *Educational Assessment; Educational Programs; Elementary Secondary Education; *Evaluation Criteria; *Instructional Materials; *National Surveys; Questionnaires; Research Methodology; School Activities; *State Aid; Tables (Data); Teacher Education

ABSTRACT

The lengthy and detailed report presents, with commentary, a comprehensive nationwide picture, for the 1974-75 school year, of: the kinds and amounts of career education activities in public elementary and secondary schools; the amount of preservice preparation provided for teachers, counselors, and administrators; and the extent of legislative, financial, and personnel support for career education provided to local school districts by State governments. In addition, previous assessments of career education materials were updated, with particular emphasis given to race and sex stereotyping and provisions for the handicapped, and other important career education surveys were reviewed. Questionnaires were sent to selected local school districts, supplemented by interviews in 16 school districts with extensive career education experience, to State education agencies, and to selected colleges of teacher education. Their responses are presented in table form with lengthy explication and discussion. The methodology used for the collection, cataloging, and evaluation of materials is discussed in detail, with particular reference to differences between commercial and noncommercial materials. The results of the current surveys are related to conditions calling for educational reform which career education seeks to ameliorate. A statement from the National Advisory Council for Career Education about the surveys is included. (Author/SA)

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ED122165

CAREER EDUCATION IN THE PUBLIC SCHOOLS, 1974-75:

A NATIONAL SURVEY

Donald H. McLaughlin

AMERICAN INSTITUTES FOR RESEARCH

Career Development Research Program

Palo Alto, California

May 1976

This report has been prepared pursuant to the provisions of Public Law 93-380, Section 406 (e) and Section 406 (g) (4). It was transmitted to the Congress in May 1976.

CE007288

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This survey was carried out for the National Advisory Council on Career Education and the Office of Education, U.S. Department of Health, Education, and Welfare under OE Contract #300-750-245.

The report has been prepared by the contractor for the Council and the Office. However, any statements of opinion which may be included do not necessarily reflect their positions or policies, and no official endorsement of such statements should be inferred.

ERRATUM

Career Education in the Public Schools, 1974-75: A National Survey

American Institutes for Research
Palo Alto, California
May 1976

Page vi (Preface and Acknowledgements)

The first part of the first full paragraph should read: "Also involved with the study were Dr. David L. Jesser, Director of the Career Education Project of the Council of Chief State School Officers, ..."

ABSTRACT

In 1974, the Congress took a major initiative to respond to calls for educational reform by creating an Office of Career Education within the U.S. Office of Education and a National Advisory Council for Career Education. Congress appropriated $10 million to be used to fund projects nationwide aimed at the development of career education. In so doing, Congress also requested that the Commissioner of Education and the National Advisory Council for Career Education carry out a survey and assessment to determine the status of career education in 1974 and 1975, to provide a firm empirical basis for consideration of future legislation in career education. This report presents the results of surveys of four facets of career education: local school districts, State education agencies, teacher training institutions, and producers of curriculum materials.

Of nine learner outcomes of career education proposed by USOE (1975), all were rated by local school districts as somewhere between "important" and "absolutely necessary." The implementation of activities to achieve these outcomes was gradual, however, with a majority of survey respondents describing their districts' efforts as "now limited." Although a majority of the nation's school districts were engaged in at least some staff development activities in career education, only 3% had taken all five steps of obtaining funds, allocating staff, writing a formal policy, forming an Advisory Committee, and carrying out formal evaluations with respect to career education. Approximately 20% of the nation's teachers have been involved in career education activities. Of fifteen student career education activities assessed, although half of the nation's students were in school districts in which at least one was implemented broadly, only a fifth were in districts that had implemented over half the activities broadly and only 3% were in districts where all had been implemented broadly. Funding needs were frequently mentioned as critical to the further development of career education in the local districts.

A clear dichotomy was apparent in the activities reported by the local districts "to help young people learn about and prepare to engage in work as a part of their way of living." There were activities that had been carried on traditionally as a part of educators' concerns that their students be prepared to cope with society when leaving school, and there were the innovative activities that were being introduced as a part of the current national career education movement. Although the distinction between the two types of activity is not altogether obvious in practice, the innovative activities were roughly identifiable as those tending to occur in districts in which formal career education policy statements had been or were being written. These activities differed from the traditional activities on two notable dimensions: they tended to be carried out in the earlier grades--traditional activities relating school to work were almost exclusively at the secondary level; and they tended to be carried out by teachers rather than counselors--counselors have long played a role that significantly overlaps the career educator role, so their involvement in these activities is not as novel as the involvement of classroom teachers.

Increased community involvement emerged as an essential component of successful career education programs: levels of activity were higher where representatives of the business, labor, and industrial community were reported involved. Also, the activities most frequently reported as effective in helping

young people learn about and prepare for work all involved bringing students together with work world representatives in one way or another.

At the State level, there was a remarkable variation of activities to promote career education in different States. Although most State education agencies had policy statements on career education, very few States had enacted specific legislation supporting career education. In most local districts in which the level of career education activity was high, there was acknowledgment that support from the State education agency was helpful; however, in many States the State education agency impact on a few local school districts, through demonstration projects, was much greater than on the majority of districts.

In the teacher training institutions, there was a great deal of discussion of career education; however, the implementation of actual career educator training programs was not yet at a significant level. Few schools of education allocated as much as 3% of their budgets to career education programs. The need, so strongly stated by local school districts and State education agencies, for help in developing the school staffs into career education, was only beginning to be met by the colleges for teacher education.

Throughout the country, the words "career education" were being heard ever more frequently, and the USOE guidelines were receiving much discussion and were having an impact in many localities. In the one-quarter of responding districts in which career education efforts were described as based on those guidelines, the level of career education activity was higher than in the other three-quarters of the districts. In terms of a pervasive reform of education, career education was beginning to have a visible impact on schools across the country in 1974-75. Its acceptance and implementation were still tentative, however, as many school districts waited to see whether "it really works."

PREFACE AND ACKNOWLEDGMENTS

The purpose of this report is to present a comprehensive picture of the status of career education in the United States during the school year of 1974-75, with some projections for the school year of 1975-76. This survey of numerous aspects of career education was authorized by the Educational Amendments of 1974, and the data collection occurred during the latter half of 1975 and the first few months of 1976. The survey includes activities and opinions from a representative sample of local school districts, from the State education agencies, from the outlying Territories of the United States, and from a special sample of sixteen school districts with extensive implementation of career education. Also, recent instructional and reference materials for career education were cataloged and evaluated. This report is intended for many audiences interested in the developing maturity of career education, in particular for policymakers in Congress, in the Federal administration, in the State governments, and in the 16,000 school districts across the country, for educators at all levels from grade school through adult education, and for the American public.

There are many persons to thank for their efforts in support of the present survey. In particular, the following staff members of the American Institutes for Research were directly involved in performing the study:

Project Director	Dr. Donald H. McLaughlin
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Also involved with the study were Dr. David L. Jesser, Executive Secretary of the Council of Chief State School Officers, who directed the survey of State education agencies, and Dr. Joost Yff of the American Association of Colleges for Teacher Education, who directed the survey of the U.S. teacher training institutions.

Many individuals were involved in the survey as consultants and reviewers. Of these persons, the following were concerned with active monitoring: Dr. Alice Y. Scates, Primary Project Monitor, USOE Office of Planning, Budgeting, and Evaluation, whose unflagging efforts made possible a successful conclusion to the project; Mr. Terry Newell, USOE Office of Career Education; Dr. Larry J. Bailey of the National Advisory Council for Career Education. Dr. Kenneth B. Hoyt, USOE Office of Career Education; Dr. John W. Evans, USOE Office of Planning, Budgeting, and Evaluation; and Dr. Duane Graham, Representative for the Committee on Evaluation and Information Services of the Council of Chief State School Officers provided valuable assistance.

In addition to the above-named individuals, numerous local and State-level education personnel were relied upon for critical review of proposed instruments and procedures. Most of all, however, we are indebted to a total of 911 school districts, 630 colleges of teacher education, the 50 State education agencies, and 650 producers of career education materials who, through their responsible and conscientious efforts, truly made this national survey possible.

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CHAPTER 1

Introduction to the National Survey

1.1 Objectives

Expenditures for public and private education from kindergarten through graduate school are estimated at $108 billion for the 1974-75 school year, and preliminary estimates place the 1975-76 figure at about $119 billion. Enrollments total about 60 million persons: 34 million in elementary schools, 15 million in secondary schools, and 11 million in colleges and universities. Over 7% of the nation's gross national product and nearly 3 out of 10 of the nation's population are engrossed in this educational enterprise. The career education reform movement is concerned with deriving maximum benefit from these investments of human and financial resources, for the individual and for the society.

Career education involves educational attitudes and practices that promote the continuity between formal schooling and those work activities, paid and unpaid, that provide satisfaction for the individual and benefit to society. Career education aims to provide persons leaving the educational system--at whatever time--with basic academic, vocational, self-understanding, and career decision-making skills, as well as work attitudes, essential to full and satisfying participation in today's rapidly changing society. The generic definition advanced by the U.S. Office of Education (USOE) reflects the broad, directional character of career education, which is defined as "the totality of experiences through which one learns about and prepares to engage in work as part of her or his way of living."

The Education Amendments of 1974 required the U.S. Commissioner of Education to "conduct a survey and assessment of the current status of career education programs, projects, curriculums, and materials in the United States and submit to the Congress...a report on such survey and assessment" (Part (e), Section 406, Public Law 93-380). This section of the law in Part (g) (4) also authorized the creation of a National Advisory Council for Career Education and specified that this same report to the Congress "include recommendations of the Advisory Council...for new legislation designed to accomplish the policies and purposes" of the law. The Advisory Council forwarded an interim report with recommendations for legislation to the Congress in November 1975. The results of the national survey and assessment of career education that are presented in this report provide background for those recommendations and additional empirical data to aid in the formulation of further legislative recommendations.

The goal of this report is to provide a comprehensive picture that reflects the kinds and amounts of career education activities currently in process in the United States. The survey project has had five specific objectives:

Objective 1. To establish baseline descriptive data on the kinds and amounts of career education in process in public elementary and secondary schools during the 1974-75 school year.

Using the local school system as a base, a representative sample of 900 school districts was selected which included school systems from each of the 50 States. Responses received from 860 or 96% of these school districts permit generalizations about career education (a) nationally, (b) by U.S. Census Region, (c) by type of community--metropolitan centers, suburbs, and others, (d) by size of enrollment, and (e) by a measure of socioeconomic status. These data were intended to assess both the progress of local formal career education programs and the frequency of specific career education activities, whether or not related to formal career education programs.

Objective 2. To determine the amount of preservice preparation provided for teachers, counselors, and administrators during 1974-75 by colleges and universities that prepare educational personnel.

All 839 colleges and universities associated with the American Association of Colleges for Teacher Education were selected for this survey. Data received from 630 or 75% of these respondents permit a tentative assessment of the extent to which schools of education have joined the career education reform movement by preparing future school staff for roles as career educators.

Objective 3. To determine the extent of legislative, financial, and personnel support for career education being provided to local school districts by State governments.

All 50 State departments of education and six outlying Territories were sampled by questionnaire. Useful data were obtained from all States and four Territories. In addition, local school districts in the sample provided information on their States' contributions to their programs as a part of the survey of these school districts.

Objective 4. To update previous assessments of both commercial and noncommercial career education materials, with particular emphasis given to race and sex stereotyping and provisions for the handicapped.

Approximately 900 commercial and 2,300 noncommercial career education materials were collected and cataloged. In addition, the commercial materials and a sample of 90 noncommercial materials were evaluated in six areas: race and sex bias, adequacy and consistency of design, learner performance evaluation, versatility (sensitivity to special users), user support components, and presence of research data information.

Objective 5. To integrate information on career education from a number of other studies and surveys and the preliminary recommendations of the National Advisory Council for Career Education with the information collected in the present surveys so as to produce a comprehensive report on the status of career education for the Congress and the public.

Four major sources were used to identify other studies and surveys: (1) references cited by USOE in the Request for Proposals, (2) additional references suggested by the National Advisory Council for Career Education, (3) references available in the ERIC system, and (4) reports identified by Career Education Coordinators in the 50 State education agencies.

The survey data presented in this report are intended to prove useful to formulators of Federal policies and programs in the area of career education by:

1. assessing the amount of career education in progress in 1974-75,
2. assessing the areas of relative strength and weakness in implementation, and
3. assessing factors related to successful implementation of career education.

1.2 Design

The project consisted of the completion of six major subtasks according to specifications of the Office of Planning, Budgeting, and Evaluation in USOE:

1. a review of a number of other important surveys of career education;
2. a survey of a nationally representative sample of 900 school districts;
3. a survey of the 50 States and the outlying Territories;
4. interviews with individuals in a small sample of school districts reported to have implemented career education successfully;
5. a survey of 839 colleges for teacher education; and
6. a survey and evaluation of over 1000 curriculum materials, both commercial and noncommercial.

The results of these tasks are described in the next five chapters and the appendixes.

Chapter 2 presents a review of other important career education surveys thus placing the present effort in context and providing a background in respect to which present findings may be considered. The surveys undertaken in the course of the project are described in detail in Chapters 3 through 6. The survey of local school districts, along with the survey of outlying Territories and the interviews with individuals in districts with career education programs, is discussed in Chapter 3. The survey of State education agencies is discussed in Chapter 4; the survey of colleges for teacher education in Chapter 5; and the survey of materials in Chapter 6. Chapter 7 summarizes the general results and states some implications derived from the data, and Chapter 8 contains the recommendations of the National Advisory Council for Career Education referred to in the law (PL93-380, Sec. 406).

For the survey of local school district career education activities, a representative sample of 900 of the nation's 16,378 local school districts was drawn, using the National Center for Educational Statistics 1973-74 data tape on public school systems. The sample was selected in order to permit generalizations about career education (a) nationally, (b) by U.S. Census Region, (c) by type of community--central city, suburban, and other, (d) by a measure of socioeconomic status, and (e) by size of enrollment. It was the intent of the sampling to obtain a representative picture of the extent to which career education was reaching all of the nation's students; therefore, no attempt was made to select only the most successful programs, but rather all districts regardless of the extent of their career education programs were eligible to be included in the sample. The sample was chosen so that each district in the sample represented the same number of students nationwide; each of the 900 selected districts represented several similar districts with a total enrollment of 50,000 of the nation's 45,000,000 students; thus, percentages of responses are direct estimates of percentages of students across the country who are being exposed to career education. They are not estimates of percentages of school districts with career education, although those percentages are obtainable from the data. This sampling method avoided the problems of differences in definition of "school district" among the States. Analyses of the data were carried out in duplicate, in one case to estimate percentages of the nation's students served and in the other case to estimate percentages of school districts rather than students.

A survey instrument was developed and field tested. It was then reviewed by representatives of the National Advisory Council for Career Education, the U.S. Office of Planning, Budgeting, and Evaluation, and the U.S. Office of Career Education, and by a representative of the Council of Chief State School Officers Committee on Evaluation and Information Services. It was then administered by mail and telephone in the fall of 1975. The responses to the survey were analyzed primarily as they related to six key questions:

1. how much career education was going on;
2. which types of activities were typical and which were lagging in implementation;

3. how important various roles in the delivery of career education were;
4. whether career education was being implemented equally for all sectors of society;
5. whether special efforts were being undertaken for the handicapped and for women and ethnic minorities; and
6. what factors were related to successful implementation of career education programs and activities.

The survey of outlying Territories was carried out as if they were six additional school districts, although the data were analyzed separately. The interviews with the "special sample" of districts nominated by leaders in the field of career education were informal but focused on the evaluation of the factors that contributed to the success of programs and of the factors that caused difficulty. Whereas the main local school district survey received a response from a single individual in each district, "special sample" interviews were held, by telephone in most cases, with individuals representing up to 17 different roles in each selected district.

The survey of the State education agencies and of the schools of education were carried out by two other organizations in conjunction with AIR: the Council of Chief State School Officers and the American Association of Colleges for Teacher Education. The samples consisted of the entire population represented by each organization. The survey instruments were adaptations of the instrument used for the survey of local school districts, in both cases much briefer than the original instrument. The results from each of these surveys were analyzed independently and are presented in Chapters 4 and 5 respectively of this report.

The survey of curriculum materials included both the indexing of over 3,000 materials in terms of seven dimensions and the evaluation of 1,000 of them in six areas. This survey added to earlier surveys of materials in career education new materials that had been produced too recently to have been included in those previous surveys. The indexing procedure was based on that developed by the U.S. Office of Career Education, and the evaluation procedures were based on an earlier evaluation of materials (Peat, Marwick, Mitchell & Co., 1974).

The data collected through the various surveys of this project were quite extensive, and the analyses contained in this report represent only a small part of what can be done with these data. The analyses chosen for inclusion are primarily those with potential policy implications. Nevertheless, there are many numbers presented, and the reader with limited time is referred to the summary section at the end of each chapter for the highlights of that chapter.

CHAPTER 2

Status of Career Education: Recent Surveys and Studies

2.1 Methodology and Overview

The current national survey and assessment of career education was intended to provide hitherto unavailable objective information on the kinds of career education activities going on in all the schools of the land. Only with such comprehensive information can planning for and evaluation of the career education movement be based on the firm foundation of facts. That is not to say, of course, that there have been no prior surveys of career education. There have indeed been a substantial number of recent empirical studies of career education, some of which the current survey builds upon and extends and others which, while not covering the breadth of the current survey, do cover certain aspects of the movement in much greater depth. It is the purpose of this chapter to review the recent surveys of career education to provide background for the data presented in subsequent chapters. It is not the purpose of this chapter to review the substantial literature on career education.

Gathering and analyzing the major surveys and studies of career education that have appeared between 1972 and 1975 was not a trivial task. The sources of information on which the search for major studies and surveys was based included: (1) the Educational Research Information Center (ERIC) System, (2) State Career Education Coordinators, (3) reports on current U.S. Office of Education contract projects, and (4) members of the National Advisory Council for Career Education and the U.S. Office of Career Education. The criterion for inclusion of material in this chapter was relevance to the concerns of Congress about career education, as set forth in Section 406 of Public Law 93-380.

In order to provide a coherent pattern for the discussion of the diverse surveys and studies, eight topic areas were selected that covered the content of the major studies; these topic areas are listed below.

1. Pervasiveness of career education
2. Prevailing attitudes and opinions concerning career education
3. Community involvement in career education
4. Types of students served by career education
5. Objectives and practices in career education
6. Instructional materials in career education
7. Staff development activities in career education
8. Evaluation in career education

There are ten reports referred to throughout the chapter, which are mentioned here for ease of reference later. Two are reports by the Council of Chief State School Officers (CCSSO), a report on the 1975 national conference of State coordinators of career education (CCSSO, 1975a), and a report of a survey carried out in the 1974-75 school year of State education agency activities and information in career education (CCSSO, 1975b). The latter report contains a great deal of data to be compared with the results of the current survey of State education agencies discussed in Chapter 4.

Four reports include assessments of progress in career education at the sites of demonstration projects throughout the country. One report evaluated the extent to which the original demonstration projects funded under Part D of the 1968 Vocational Education Amendments met the objectives of that law (Development Associates, 1975a), and a second provided information on exemplary vocational education projects funded by the Division of Vocational and Technical Education of USOE (USOE, 1974a). The projects funded from these sources were aimed at innovation, going beyond traditional vocational education, and as such they represent the earlier Federally funded projects in the current career education movement. A third report (USOE, 1974c) is a resource guide to career education, describing projects in local districts around the country, trends in the 50 States, postsecondary programs, work world collaboration steps, and noncommercial career education curriculum materials. That report was not intended to be an exhaustive reference but rather to give a broad picture. A fourth report, by Policy Studies in Education (PSE, 1974), contains the results of a survey of 72 selected outstanding career education programs across the country.

Finally, there are four reports of a more general nature: a resource guide to key USOE programs involved in the development of career education (USOE, 1974b); an introduction to career education setting forth its principles and definitions, including the results of a survey of the career education conceptualizations of over 200 State and local career education practitioners from around the country (USOE, 1975); an empirical study by the College Entrance Examination Board of the difficulties of the education-to-work linkage (CEEB, 1975); and a guide to the evaluation of career education (Development Associates, 1975b).

Search of the ERIC System produced 42 references identified as career education surveys. Microfiche copies of these studies were analyzed for information that could be of value to policy formulators concerned with incremental improvements in career education. There was some overlap between these studies and those reviewed above.

The 50 State Coordinators of Career Education who were contacted by phone in preparation for the local school district survey (see Chapter 3) were another source of information about recent surveys and studies of career education. Each coordinator was asked whether his or her State had any recent statewide reports (planning documents, surveys, assessments, etc.) that might supplement the information included in this report. Information from reports produced by the States of Illinois, Michigan, Nebraska, and Oregon is included.

In the next eight sections of this chapter, the studies are reviewed according to these topic areas. A deliberate effort has been made to be selective of the large volume of literature reviewed, to provide the reader with an overview of the highlights of the recent studies of career education without drowning her or him in an ocean of detailed findings. All of the reports reviewed here are available to the public for those who desire greater depth of coverage.

2.2 Pervasiveness of Career Education

Former U.S. Commissioner of Education Sidney P. Marland, Jr. placed his developing notion of a nationwide career education reform movement before the Chief State School Officers at their annual conclave in Washington, D.C. on 16 June 1971. Eighteen million dollars in Federal funds were available for such a venture. One-half was already allocated by law to the States for discretionary use in vocational education development. The Commissioner had discretionary authority over the remaining nine million dollars. His carrot was a simple one: His proposition was that if all the Chief State School Officers would agree to use their discretionary nine million dollars for career education model-building, he would double their risk money by allocating the remaining nine million dollars to the same enterprise. Following formal procedures between the U.S. Office of Education and each State, the money was delivered and "career education" in its newly developing sense was launched.

Less than five years later, career education is now permeating educational program thinking throughout the nation. More significantly, after four and a half years career education is still of concern in a field where fads have often erupted with brilliant oratorical support and then quietly faded away. There have been significant amounts of planning and organizing of career education programs in many State education agencies. Many innovative teachers, counselors, and administrators in local school districts across the nation have developed and received support for a large variety of demonstration projects in the search for the best methods of making the schools more relevant to the needs of all young people in preparing for careers. In addition, numerous organizations outside the school system have supported career education activities.

The Office of Career Education in the U.S. Office of Education reported in November 1974 the growth of State-level support for career education as shown in Table 2.1 (USOE, 1974c). According to another survey (CCSSO, 1975b), the States implementing career education were spread throughout the country. The CCSSO study found that 55 of 57 States and other jurisdictions report the existence of a staff member responsible for career education. Their titles and extent of time devoted to career education varied, but in 70% of the States and jurisdictions "career education" appeared in their job title. This fact alone indicates significant penetration of the career education concept throughout the nation. In 1968 only one State agency had such a person on its staff. Also, 64% of the 55 reporting States and jurisdictions had either an Advisory Council for Career Education or a comparable

Table 2.1

Growth of State-Level Support for Career Education

Type of State Activity	Number of Actions Taken for First Time							
	1968*	1969*	1970*	1971	1972	1973	1974	Total
State Board Resolution	-	2	-	3	4	5	1	15
State Position Statement	-	2	1	4	13	13	2	35
State Plan	-	1	3	1	4	13	3	25
State Coordinator	2	3	2	4	17	10	4	42
State Legislation	-	-	-	-	2	1	2	5
State Budget	-	1	2	1	6	9	6	25

Source: USOE, Career Education, the State of the Scene (Washington, D.C., 1974c).

*The term "career education" was first used in 1971. Actions taken prior to 1971 were precursors to the career education movement, although they were (and still are) wholly consistent with its basic concepts.

council that so acts. This is a remarkable percentage in so short a time period. It provides some measure of the political pervasiveness of career education.

In an earlier survey (CCSSO, 1975a) in preparation for a national conference, two-thirds of the States submitted narrative papers. These papers were interpreted to suggest that:

- most of the responding States indicated the existence of a philosophy statement for integration of career education into the total curriculum;
- most responding States indicated a high degree of public support for career education by their Chief State School Officer;
- most responding States indicated that implementation activities were occurring at the elementary levels more than other levels;
- career education was growing and receiving increased attention in the States; and
- career education has been given a high priority status in many States.

Thus, State-level activity appeared to be substantial prior to the present survey.

Local school districts. The information available to the Office of Career Education in November 1974 indicated that career education was taking place in approximately 5,000 of the nation's 17,000 school districts. Based on data from 29 States, the CCSSO study (CCSSO, 1975b) found that about 6% of the nation's elementary school pupils were involved in career education efforts in 1972-73. The percent more than doubled, to 13%, in the following school year, 1973-74. Meaningful data for junior and senior high school pupils were more difficult to obtain, but figures received and conversations with State education agency career education leaders in the Spring of 1975 clearly indicated significant involvement of junior and senior high students.

The Fiscal Year 1975 Career Education Program Plan for the National Institute of Education (NIE) reported that career education was taking place on a nationwide basis. In all areas of career education (including legislation, funding, planning, curriculum development, school-community cooperation, and personnel development) some activity was to be found in most States and, in a few States, all components of a career education program from grades K-12 were being initiated.

Exemplary projects. Section 142(c) of Part D of the Vocational Education Amendments of 1968 (Public Law 90-576) provided funding for the U.S. Commissioner of Education to use in awarding direct grants or contracts to local school districts and other appropriate organizations for the conduct of exemplary projects in vocational education. The second three-year round of exemplary projects focused on career education, and therefore represented an important source of support for career education development. These projects are currently operating with funds through June 1976.

Each of the 50 States plus the District of Columbia, Puerto Rico, the Virgin Islands, the Trust Territory of the Pacific Islands, Guam, and American Samoa has a project, and most projects are operating in a specific local education district. State-level education agencies administer multi-district projects in some States, and in some cases multi-counties, community colleges, or State universities are included in the exemplary projects. Descriptions of site information, administrative structure, program design, program components, unique features, and who to contact for information for each project are found in the USOE publication, Abstracts of Exemplary

Projects in Vocational Education, Bureau of Occupational and Adult Education, June 1974.

One recent study (PSE, 1974) concluded that 60% of the then existing career education projects were located in the populous Northeast and the populous West. They hypothesized that this pattern of distribution arose in large part because of the fact that Federal funds under the applicable statutes were allocated to the States on the basis of population. On the other hand, PSE concluded that career education was taking place in farming areas, in small towns, in suburban communities, and in the nation's largest cities. The distribution of the projects appeared to parallel the characteristics of the nation's approximately 16,000 school districts. This pattern may have arisen from the fact that most of the Federal funds available for career education were administered by State education agencies, which customarily try to serve all kinds of school districts within State boundaries even-handedly.

In summary, the development of career education in local schools prior to 1975 had been primarily in terms of innovative demonstration projects in a fraction of the nation's school districts, although there were at least some career education-related activities in over a quarter of the districts.

Organizations outside the school system. Spot checks with several national organizations and government offices tended to support the notion that career education is growing and receiving increased attention. The Office of Women's Programs in the Office of Public Liaison in the White House confirmed that they are actively involved in broadening career opportunities for women. The Office of Women's Programs cooperates with several organizations in this regard, such as the advisory council on women's educational programs of the Association of American Colleges, and the National Association of Women Deans, Counselors, and Administrators.

As well as participating actively in the political aspects surrounding career education in Washington, the AFL-CIO has developed several materials that relate organized labor's viewpoint toward career education. The Chamber of Commerce of the United States has testified before committees of the Congress and has also published materials on career education. At a statewide conference on career education in Columbus, Ohio, the General Motors Corporation (1975) announced its new corporate policy in support of career education efforts in the nation's schools and colleges. That policy included the appointment of career education coordinators in each of General Motors' plants and facilities.

The Office of Spanish Speaking Programs of the U.S. Civil Service Commission has recently published two booklets designed to broaden the career opportunities for Spanish-speaking Americans. At the National Council of Churches, program leaders have interacted with the Office of Career Education, and the professional church leadership committee is actively discussing whether or not emphasis will be placed on career education as distinct from vocational education.

2.3 Prevailing Attitudes and Opinions Concerning Career Education

The concept of career education has received widespread endorsement from educators at the local level (Development Associates, 1975a). This study reported that well over half the teachers and counselors surveyed in each of 50 locations indicated that in their judgment it was important to include career education in the school curriculum. Additionally, results of a recently conducted statewide survey by the Survey Research Laboratory at the University of Illinois indicated that there is strong public support for increased emphasis on career and vocational education in the Illinois public schools.

Worthington,* in reviewing research on career education, has reported that among 900 California high school teachers, attitudes were most favorable toward career education when teachers (1) were informed about career education, (2) had nonteaching work experience, and (3) were teaching in vocational education or industrial arts. Another dissertation researcher found that, among 240 Massachusetts high school teachers, knowledge of career education was greater among academic teachers than among vocational teachers.

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*R. M. Worthington, "Review and Synthesis of Research Concerning Career Education." (An unpublished study commissioned by the National Advisory Council on Career Education, 1975.)

Polls taken in recent years (Gallup, 1975) have indicated strong public support for the goals of career education. In 1972 respondents were asked for the goals of career education. At the top of the list, 44% of the sample stated "to get better jobs." Thirty-eight percent answered "to make more money--to achieve financial success." The 1973 Gallup poll asked, "Should public schools give more emphasis to a study of trades, professions, and business to help students decide on their careers?" Ninety percent of the respondents said yes, more emphasis should be given; only 7% said no, while 3% had no opinion.

NIE (1974) reported survey results indicating that Americans placed preparation for work, economic success, and better jobs above a variety of other reasons why people should go to school. However, NIE also reported that there was some skepticism about whether career education was only a fad and whether it would be used to stop minorities from going on to higher education and thus professional positions.

There is also evidence that students' attitudes toward acceptance of career education parallel, if not surpass, those of educators and the public. In an assessment of Oregon's educational needs (Clemmer, 1970), students and dropouts ranked the following need first of 27: "Students need to explore a wide variety of career opportunities and to learn about job opportunities from representatives of business and industry." This same need was ranked fifth by Oregon's educators and fifteenth by the general public. Other reports, however, have pointed to difficulties in the total acceptance and implementation of career education. A statewide survey of Illinois (Tadlock, 1975) indicated that while there was general awareness of the nature and purpose of career education within the State, there was also much confusion, and the awareness that did exist needed to be translated into further action by a higher level of understanding and commitment by more district-level policymakers and school administrators.

The general constraints that inhibit the total acceptance of career education formed a topic for discussion at the conference of Chief State School Officers held in Denver in April 1975 (CCSSO, 1975a). A core of representative, but not inclusive, broad constraints that seemed particularly important was identified.

> The attitude of teachers toward change. The desire to preserve the status quo is often a result of a self-concept of instructional and administrative staffs; this must be altered so that they perceive themselves as change agents.
>
> Legal and regulatory constraints. These are related to the rigidity of the system toward students, and include: poor provision for students to exit and re-enter the system; restraints relating to the Carnegie unit; the underutilization of experimental learning; the rigidity of staff in application of teaching methods and materials; lack of articulation between levels and among areas of instruction; and the arbitrary distinction of the roles of teachers and learners.
>
> Dependency on software rather than on a total process as a means for bringing about educational change can have unproductive results.
>
> A lack of coordination among teacher training institutions and all other educational agencies. There is a need for redirecting teacher preparation and inservice training programs in the light of current needs of schools and the student populations they serve.

In summary, by 1974 career education was being widely discussed, it had a broad base of support, but it involved a sufficiently significant reform of education to have evoked some criticism from concerned school staff and administrators.

2.4 Community Involvement in Career Education

The need for community involvement in career education has been expressed by virtually everyone active in this educational reform movement. In the words of Kenneth Hoyt (USOE, 1974c), Director of the U.S. Office of Career Education:

> ...the days of educational isolationism are past. It is time that our formal educational system join forces with all other segments of the total society, including both community service agencies and the business-industry-labor community in a comprehensive effort to meet the varied and continuing needs for education on the part of both youth and adults. Rather than either complaining about or competing with other kinds of educational opportunities, all must collaborate in providing appropriate educational opportunities for all citizens. [p. 27]

The Policy Studies in Education (PSE) report (1974) states that in their nationwide survey of career education programs, all 72--without exception--used local employers and local workers in some fashion. The extent to which educational and work institutions are linked was also examined in the College Entrance Examination Board (CEEB, 1975) report on Bridging the Gap: A Study of Education-to-Work Linkages. For the purpose of analysis, CEEB developed a continuum of linkage patterns with the major points on the continuum being Separation, Communication, Participation, Substitution, and Integration. The CEEB analysis indicated that education and work institutions for the most part seemed to be at the point of "communication" and moving toward "participation" (e.g., students involved in work settings for some period of time).

Strategies for informing the community about the purposes and activities of career education, and the particular groups to whom this information is directed, varied greatly. The Council of Chief State School Officers (CCSSO, 1975a) identified the following publics for dissemination: parents, teachers, administrators/supervisors, guidance staff, business, industry, labor, professions, government, and students. CCSSO pointed out that the modes for disseminating career education information internally differ from the most effective modes of external dissemination. Examples of the former are newsletters, brochures, workshops, and exhibits, while the latter consist of radio, television, service club presentations, and community workshops in addition to printed media. In the districts included in the PSE (1974) survey, most information on career education was disseminated at school-related meetings and meetings of employers, community groups, civic associations, and government agencies. Seventy percent of the projects surveyed made use of local newspapers, radio, and television to disseminate information. Half of the projects also used newsletters to inform the public, and nearly half invited visitors into the school to enable them to observe what was happening.

The specific manner in which community members have been involved in career education also varies. The 1974 PSE report found that while every project studied used local employees and local workers in some fashion, the amount of use ranged from taking students on field trips to observe places of employment to placing them in actual paid employment for long periods of time while still in school. Many projects also arranged for teachers, counselors, and librarians to work in local business on a part-time basis (usually over the summer). Sixty percent of the PSE study sites used individuals in the community as classroom speakers and as contact persons at field trip sites.

The PSE study also indicated that the tradition of using advisory councils which is so strong in vocational education had been extended to career education. The members of these committees represented a balanced group of school and community personnel including parents, employers, union leaders, and representatives of community organizations. In most instances, however, advisory councils functioned as sounding boards rather than actual committees.

Parents have also been recognized as important ingredients in the career education process by almost all career education programs. The parents play many roles; for example, according to the Pima County (Arizona) Developmental Career Guidance Project: Evaluation Report 1974-75 (Behavioral Research Associates, 1975), the following percentages of parents participated in career education activities in that county:

Field trips	71.9%
Career fairs	8.8%
Resource speakers	8.8%
Work exposure	7.0%
Career days	3.5%

This report indicated that parents most frequently learned about career education activities through their children or friends who also had children.

Many other specific examples can be cited in which the business, labor, and industrial community and parents have been involved in career education. For a partial listing of some of the more unusual examples, the interested reader is referred to Career Education: The State of the Scene prepared by the Office of Career Education (USOE, 1974c). In summary, it appears that in virtually all career education programs the importance of community involvement has been recognized and specific steps have been taken to insure at least partial involvement.

2.5 Types of Students Served by Career Education

Career education is designed to involve all young people. This, however, is a difficult design to carry out in practice. In Career Education: The State of the Scene (USOE, 1974c), the Office of Career Education stated that while innovative career education efforts were underway by 1974 to meet the needs of special groups, it would be incorrect to say that these efforts were commonplace. Major initiatives at every educational and governmental level were still needed to make career education a reality for populations of handicapped students, gifted students, minority groups, and women. Career Education: Programs and Progress (USOE, 1974b) stated that considerable work still remained to be done to fully meet the goals of career education for such groups as migrants and inmates of correctional institutions. In Taxonomy and Profiles of Career Education (1974), PSE reported that the students in the schools served by career education projects were predominantly white, with blacks being the largest single minority group. They reported that blacks and other ethnic minorities appeared to be somewhat underrepresented in the school districts served by career education. This report also stated that while normal, gifted, and handicapped students were candidates for career education in most projects, most projects have not made special provisions for gifted and handicapped populations.

The National Institute of Education (NIE, 1974) has focused its career education efforts on two groups: youths who drop out of school and encounter problems, and the mid-career person who wants to change jobs or advance in her or his job. This narrower target population focus of NIE, however, has not been accepted by educators in general. The 1974 USOE report Career Education: Programs and Progress provided evidence that programs in career education were from the outset targeted for all types of students. Similarly, Taxonomy and Profiles of Career Education (PSE, 1974) presented data from a nationwide survey of career education conducted in 1973 in which all projects surveyed, without exception, indicated that they considered career education suitable for all students.

2.6 Objectives and Practices in Career Education

Amidst the sound and fury of millions of words about career education, the real test of its significance lies in the school curriculum and the teaching-learning activities that involve students. What impact has the career education reform movement had on the school curriculum and on the opportunity for students to benefit from a new instructional attitude? The evidence from earlier studies and surveys is less rigorous than one would like, but it does give some indication of the ways in which career education has penetrated the armor of the educational enterprise to affect real students in real places across the country.

For purposes of clarifying what is meant by career education in practice, a consensus was obtained (USOE, 1975) on nine student objectives for career education and fourteen curricular practices. The nine objectives aimed to produce students at any age and any level who would be:

> 1. Competent in the basic academic skills required for adaptability in our rapidly changing society.
>
> 2. Equipped with good working habits.
>
> 3. Capable of choosing and who have chosen a personally meaningful set of work values that foster in them a desire to work.
>
> 4. Equipped with career decision-making skills, job-hunting skills, and job-getting skills.
>
> 5. Equipped with vocational personal skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.
>
> 6. Equipped with career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.
>
> 7. Aware of means available to them for continuing and recurrent education once they have left the formal system of schooling,
>
> 8. Successful in being placed in a paid occupation, in further education, or in a vocation consistent with their current career education.
>
> 9. Successful in incorporating work values into their total personal value structure in such a way that they are able to choose what, for them, is a desirable lifestyle.
>
> [p. 11]

The curricular practices recommended in that policy paper were:

1. Substantial increases in the quantity, quality, and variety of vocational education offerings at the secondary school level and of occupational education offerings at the post-secondary school level.

2. Increases in the number and variety of educational course options available to students with a de-emphasis on the presence of clearly differentiated college preparatory, general education, and vocational education curriculums at the secondary school level.

3. The installation of performance evaluation, as an alternative to the strict time requirements imposed by the traditional Carnegie unit, as a means of assessing and certifying educational accomplishment.

4. The installation of systems for granting educational credit for learning that takes place outside the walls of the school.

5. Increasing use of noncertificated personnel from the business-industry-labor community as educational resource persons in the educational system's total instructional program.

6. The creation of an open-entry/open-exit educational system that allows students to combine schooling with work in ways that fit their needs and educational motivations.

7. Substantial increases in programs of adult and recurrent education as a responsibility of the public school educational system.

8. Creation of the year-round public school system that provides multiple points during any 12-month period in which a student will leave the educational system.

9. Major overhaul of teacher education programs and graduate programs in education aimed at incorporating the career education concepts, skills, and methodologies.

10. Substantial increases in the career guidance, counseling, placement, and followup functions as parts of American education.

11. Substantial increases in program and schedule flexibility that allow classroom teachers, at all levels, greater autonomy and freedom to choose educational strategies and devise methods and materials they determine to be effective in increasing pupil achievement.

12. Increased utilization of educational technology for gathering, processing, and disseminating knowledge required in the teaching-learning process.

13. Increased participation by students, teachers, parents, and members of the business-industry-labor community in educational policy making.

14. Increased participation by formal educational institutions in comprehensive community educational and human services efforts.

[pp. 12 & 13]

Using 72 projects as the data base, PSE (1974) concluded that when career education appeared in the elementary schools, it appeared as a body of content and concepts infused into the regular curriculum. Only rarely did a project attempt to supply knowledge, skills, and attitudes to youngsters separately from the regular program. At the high school level, about 20% of the projects reported that career development was accomplished separately from regular courses. Nearly all of the respondents agreed that career education does not replace vocational education.

The respondents reported that teachers at all grade levels were actively participating in career education instruction, with elementary teachers more active than high school teachers. While a majority of the projects indicated that guidance counselors play a role in instruction, regular classroom teachers clearly carried most of the load in these projects.

The exemplary projects in the 50 States, supported under Section 142(c) of Part D of the Vocational Education Amendments, reveal that there is a remarkable variety of instructional career education activities occurring in urban and rural school systems (USOE, 1974a). Career Education Case Studies of Selected, Diverse, and Innovative Programs (Abt Associates, 1975), written to increase awareness of innovative career education practices, provides informal, descriptive portraits of diverse programs as they have been developed, are operating, and are changing. In appraising the facilities required for career education programs, Systems Development Corporation (1975) found that facilities that can support career education program are not necessarily different from traditional educational facilities. Indeed, successful career education programs were frequently conducted in standard classrooms, with little or no modification to the existing space, particularly in the elementary schools. For later activities in career exploration and preparation, classrooms can be supplemented with mobile units, "found space" in the community, and new buildings that can serve as central career centers used by a number of schools.

A crucial area of substance for career education in practice, an area in which students feel a strong need for help, is information about *what jobs are available*. A young person desires to use her or his abilities to do things interesting and worthwhile, and yet the chance to do this depends on what needs to be done in society, or (not quite the same) what employment roles are available in which one's efforts can most productively be put to use. The most sensitive guidance procedure, the most careful career exploration, is meaningless unless it includes information on "the job market" in the sense both of next year and of the year 2000.

CEEB (1975) found that schools and colleges depend on other government agencies to supply information about manpower needs. Getting the right manpower data in the right form at the right time and deriving their implications for school curriculums continue to be problematical, despite many efforts of schools to work with other agencies. Nevertheless, a sizable number of linkage systems are being used. The following abbreviated descriptions are illustrative.

In California, the State labor agency projects manpower needs for the State as a whole and for the thirteen largest Standard Metropolitan Statistical Areas. Revised every two years, the projections cover about 450 occupations, giving more elaborate attention to nonprofessional jobs. The projections are distributed to every school and school system in California, from high schools to graduate schools.

Florida uses both State and regional advisory councils to inform educators at both secondary and postsecondary levels about job entry requirements and what these imply for school programs. A statewide committee of 100 labor, business, and industrial leaders advises the schools on current and future demands for trained workers in Florida and what these imply for current and future high school training programs.

In Ohio, an elaborate pattern of cooperation linking both State and local units of the Department of Education and the Bureau of Employment Services is now in its second year. Ohio has been divided into a number of vocational educational planning districts responsible for coordinating programs in high schools in their geographic areas. The local employment service bureaus provide local manpower statistics, through State agencies, to the vocational education planning districts. The district then works to link educational programs to occupational settings. Although still in its early stages, the device has already created a desirable spirit of cooperation among State and local personnel in the education and employment agencies.

Despite these and other examples, the study (CEEB, 1975) interjects this caution:

> It appeared in New Jersey, as it had in Ohio and in other States, that fully satisfactory techniques still do not exist for taking data available from the Department of Labor and putting it into the form most useful for modifying school programs. [pp. 43 & 44]

This finding reflects a gap between theory and practice. For example, as early as 1973, the National Commission on the Reform of Secondary Education established by the Charles F. Kettering Foundation made the following recommendation in The Reform of Secondary Education (1973):

> Suitable job placement must be an integral part of the career education program for students planning to enter the labor force upon leaving school. Secondary schools should establish an employment office staffed by career counselors and clerical assistants. The office should work in close cooperation with the State employment services. Agencies certifying counselors for secondary schools should require such counselors to show experience in job placement as a condition for granting initial certification. [p. 50]

Clearly, there is room for significant increases in the collaboration of schools and the work world to prepare young people for and place them in appropriate, rewarding work roles.

2.7 Instructional Materials in Career Education

Since 1970 thousands of materials, both commercial and noncommercial, have been produced and a fair amount of information about them has been obtained. Considerable attention and support related to the production and dissemination of materials has been given at the national level. Recent efforts to catalog and evaluate these materials are described in Chapter 6.

Recently, the U.S. Office of Career Education has awarded a planning grant to the University of Montana along with 10 other major universities to develop a National Cooperative for Career Education (NCCE). The purpose of the cooperative is to produce a nationwide delivery system for career education materials and models, by gathering materials into a central library and placing them in a computerized retrieval system. The cooperative also provides for training of educators in the selection and use of materials.

A fairly substantial portion of conference time was devoted to instructional materials at the CCSSO Conference in Denver (CCSSO, 1975a). The assembled State leaders recommended the creation of a "Career Education Materials Dissemination Task Force" to accomplish the tasks of (1) examining and standardizing existing classification systems and (2) examining and determining a standardized dissemination system. They also recommended the establishment of a national task force to provide information to commercial producers and distributors as they develop future curricular materials.

Aware that a significant barrier to attaining effective career education is inadequate curricula, NIE has adopted a strategy that includes the design, development, testing, and dissemination of career education curriculum materials. The Comprehensive Career Education Model originally developed by the Ohio State University Center for Vocational Education has been modified by the American Institutes for Research, and 135 instructional modules are currently being tested in 35 school districts across the nation. In addition to these instructional materials, NIE efforts in the curriculum area have included the development of resource guides, handbooks, and teacher training materials.

Types of materials being used. The report of the 1974 mini-conferences (PSE, 1974) dealt with several aspects of instructional materials. Specifically, data were collected on grade level, sources of materials, recency of materials, type of media, and services provided by project staff. Major findings were that (1) there was greater usage of materials at the elementary grade levels than at other levels, (2) locally developed materials were preferred over commercial or noncommercial materials, (3) printed materials predominate, but audiovisual materials constitute a significant proportion of materials used, and (4) project staff spent considerable time on identification and production of materials.

In Arizona, a survey (Arizona, 1974) reported that 4,700 teachers were involved in the development of career education materials. In a Nebraska survey (Akerlund, 1974), curriculum materials in use came from a variety of sources. However, 64% were developed or adapted by local staff, and 48% were commercially prepared.

In an Illinois study (Tadlock, 1975), the development of career education materials was a major area of concentration in 42% of all projects funded since 1970, especially at the elementary level. The use of materials developed directly by three State-funded projects (ABLE, Career Development for Children, and OCCUPAC) was indicated in 39% of the responses. Half of the districts reported purchasing commercially produced career education materials.

It appears, generally, that there was a preference for locally developed career education materials over commercial materials and that the development of these materials was a major activity for local school district staff concerned with career education.

2.8 Staff Development Activities in Career Education

Staff development must be a central objective of any educational reform movement if it is to have lasting effects. In a time of expanding schools, this might be most significantly accomplished by the development of preservice training programs; however, with the current spirit of retrenchment in the school system, the primary method of change must be inservice training. While a number of major publications produced in 1974 and 1975 touch upon the general area of staff development, the information is fragmentary. The only safe conclusions that can be drawn are the following:

1. There is wide variation in practice in terms of who receives training, how much training is needed, and the methods being used; and
2. There is a fair amount of recognition of the need to increase both inservice and preservice activities at State and local levels and of the need to involve institutions of higher learning.

At the Council of Chief State School Officers conference (CCSSO, 1975a), there was general agreement that teacher training institutions have not yet been active in preparing teachers to use the concept of career education in their teaching. A list of 16 recommendations relating State education agency responsibilities for both preservice and inservice training within their respective States was developed, including the role higher education must play, particularly in integrating career education into teacher training curricula; the importance of coordination among State-level, local, and higher education personnel; proper use of classroom teachers already proficient in concepts of career education; and the provision of inservice and preservice opportunities for publishers, along with other business, labor, and community representatives.

How many educators are being trained? Two selective national surveys have been made recently as well as three State surveys that give some indication of how many educators are being trained.

In the CCSSO study (1975b), 28 State education agencies reported the existence of career education inservice programs for teachers during the 1972-73 school year, with about 8% participation. Caution must be used in interpreting these figures, due both to the fairly low response rate and the fact that the responses were estimated by State education agencies which did not have the resources for a thorough survey of the districts in their States.

Data on 72 projects presented at the career education mini-conferences indicated that between 25% and 50% of school personnel receive orientation training (PSE, 1974). In Arizona in 1974, professional staff retraining activities involved 47% of the professional staff in Arizona Career Education Project areas (Arizona, 1974). In the Illinois study (Tadlock, 1975), nearly one-half (46%) of all projects studied stated they had inservice education as a major area of project activity. The largest proportion of these efforts were aimed at classroom teachers and counselors. In a special substudy involving 152 persons who served on State vocational education evaluation teams, 59% of those who responded identified the need for consultant services in the provision of educator inservice education.

What kind of training methods are used? The most comprehensive set of descriptive data related to staff development comes from the 72 projects assessed as a part of the 1974 mini-conference series (PSE, 1974). Highlights from this study are that (1) training has been done both by project staff and outside consultants, (2) workshops and group discussions were the most frequently used training methods, (3) different methods and materials needed to be used at different school levels, (4) locally developed materials were preferred over commercial or noncommercial materials, (5) most training occurred after school or during summers, but some occurred during school hours, and (6) about half the trainees received compensation, while about one-third received college credit.

The Office of Career Education has published case history reports on inservice and preservice activities in selected and representative institutions of higher learning (USOE, 1974c). These activities included regular courses (both on and off campus), workshops, seminars, internship programs, and the development of media centers.

2.9 Evaluation in Career Education

While the need for evaluation of the effectiveness of career education programs is well recognized, there are many problems a local school district must face when attempting to find out whether a given program works.

A recent USOE publication (1974c) succinctly pinpoints the problems in trying to evaluate career education programs:

> As with any proposed education program, the question "does it make any difference in student learning?" must be addressed. In the case of career education, this question has not been adequately addressed to date. Part of the reason lies in the newness of career education programs. Another reason is that many of the outcomes of career education are long range...and thus cannot be measured. A third problem is that instruments of sufficient validity and reliability do not exist in many of the areas which career education addresses. Finally, evaluation is expensive and requires considerable expertise. Often funds and/or the capability are not present in local school systems. [pp. 155-156]

CCSSO has consistently stressed the need for good evaluation practices in career education, and a substantial portion of their 1975 conference was devoted to problems related to assessment and evaluation (CCSSO, 1975a). A crucial problem noted in that conference was a lack of guidelines and instruments needed to carry out meaningful evaluations. In response to this need, a guide for the evaluation of career education programs has been prepared by Development Associates (1975b) under contract to USOE. The objective of that guide was to contribute to the improvement of career education evaluation efforts in local school districts by providing to program managers and their staffs the necessary background on evaluation techniques, issues and problems for decision making, and program direction for implementation of change. In that guide, standardized tests were reviewed and related to the nine general career education learner outcomes specified by USOE (1975c).

Current practices and needs. The report on the 1974 mini-conferences (PSE, 1974) dealt extensively with practices related to evaluation in career education and reported on both project evaluation and program evaluation. According to that study, (1) both internal and external evaluators from private firms, universities, and State education agencies were involved; (2) the most commonly assessed activities were project financing, project staff, number of schools served, populations served, use of community resources, curriculum materials services, dissemination of information, local public relations, training of staff, the effect of both the career curriculum and the regular curriculum on pupil performance, the extent and quality of implementation, and the acceptability of the program to various school and community groups; (3) data sources included project staff, school staff, project records, students, former students, project products, and the community; and (4) the most common types of instruments used include questionnaires, interviews, observations, and review of documents. Evaluations in terms of career outcomes of alumni of career education programs were not directly covered in that study, but there were indications that they were rare.

Highlights of the 1974-75 survey by the CCSSO (1975b) as it related to evaluations were that (1) 35% of the State education agencies responding stated they had a plan for evaluation of career education; (2) a higher proportion of locally developed instruments were being used than State-developed or standardized instruments; and (3) some interview and observation techniques were being used in about one-third of the reporting States. In the Nebraska survey (Akerlund, 1974) mentioned previously, almost two-thirds of the districts surveyed stated they made follow-up studies on graduates who went to college, and 60% made such studies on graduates not going to college. Follow-ups on dropouts were somewhat less frequent (43%).

In the Illinois survey (Tadlock, 1975) the consensus was that the area of career education assistance that most needed to be strengthened was project evaluation. In a substudy of 24 projects in Illinois it was found that a large proportion of them had no system for evaluating their career information (education) efforts. Of those who indicated some criteria existed for assessing the impact of career education, the methods used to assess career education were usually informal and took the form of teacher observation of students, teacher reaction to programs, and informal surveys of students. The impression conveyed by many local districts was that there was a need for the development of clear and easily determined criteria for evaluating career education efforts at both the elementary and secondary levels.

Evaluation data. Actual evaluation data that have been collected are of three kinds: needs assessment data, process data, and student outcome data. Information is available at national, State, and local levels.

In a recent review of 41 career education evaluations, Schager* found cause for concern about the efficacy of career education programs. Her analyses indicate that although students generally react positively to career education, the results of evaluation can lead to improvement in choices of emphasis on objectives for different age levels. Also, she found virtually no evaluation of job placement programs.

The Adult Performance Level project (APL, 1975), sponsored by the U.S. Office of Education and conducted by the University of Texas at Austin, obtained results that indicate that nearly 35 million adults--almost a third of the adult population--have more trouble with everyday problems in consumer economics than in any other knowledge area. The study also concluded that 39 million Americans are unable to perform basic arithmetic computations, and another 30 million barely get by. They noted that some States, notably Oregon, have already begun requiring students to complete a series of adult life-related performance tasks before awarding certification of high school completion.

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*C. R. Schager, "The Efficacy of Career Education: Other Ways of Assessing Effectiveness." (An unpublished study commissioned by the National Advisory Council on Career Education, 1975.)

The National Longitudinal Study of the High School Class of 1972 sponsored by the National Center for Education Statistics (1976) reported that one year after high school, 35% of the total sample were not employed in full- or part-time jobs. Vocational-technical students were much more likely than others to have obtained specialized training in high school and somewhat more likely than others to use what they had learned. However, since career education programs as presently defined were not widely in use prior to 1972, there are no data available from this study relevant to the specific effects of career education programs on employment.

National Assessment of Educational Progress and career education. The National Assessment of Educational Progress (NAEP), a multi-million-dollar-a-year program, has since 1969 been obtaining information on what school children and young adults know, and what skills, attitudes, and understandings they have in a wide variety of learning areas.

In 1973-74, exercises in Career and Occupational Development (COD)* were administered to approximately 104,000 youngsters at ages 9, 13, and 17 and to approximately 2,200 adults. The five major goal areas were:

I. Prepare for Making Decisions,
II. Improve Career and Occupational Capabilities,
III. Possess Skills that are Generally Useful in the World of Work,
IV. Practice Effective Work Habits, and
V. Have Positive Attitudes Towards Work.

The results of the assessment, designed for dissemination beginning in 1976, included information and products for use by educational decision-making bodies, including State and local agencies. Following the usual

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*Products and information are available through National Assessment of Educational Progress, 300 Lincoln Tower, 1960 Lincoln Street, Denver, Colorado 80203.

NAEP review procedures, the COD objectives to be assessed were reviewed by subject matter specialists for the authenticity of the objectives, by educators for their desirability as educational goals, and by citizens for their importance as things youth and young adults should know, feel, or understand.

For each of the five goal areas, the various objectives to be assessed were related to the three age levels. For example, for the objective, "Be aware of own current interests and values," the nine-year-olds should be able to discriminate among their own current likes and dislikes in leisure activities and home chores; 13-year-olds should be able to discriminate among their own current interests and values; 17-year-olds should be aware of their own current interests and values that may affect career decisions; and young adults should be aware that their own interests and values may not coincide with those of others.

A total of 61 different exercises relevant to career education assessment have been released. These include exercises that were designed to be administered individually as well as in groups, and exercises that are given in open-ended format and must be scored by hand as well as those that can be objectively scored by machine. Often individual administration and hand scoring are not economically feasible for State and local education agencies. Twenty-four exercises are designed to be group administered and objectively scored.

Multiple reports are being planned, the first of which will be made available in September 1976 and will be on adult data only. The analysis will include comparisons by region, race, sex, size and type of community, parental education, family income, level of own education, enrollment in continuing education, and type of high school (public, private, or parochial). Reports for other age levels will follow at periodic intervals and are now in the final planning stages. Information has been gathered from the 17-year-olds about job experience, job satisfaction, and employment plans.

In addition to the objectives, exercises, and reports that are available through NAEP, the National Assessment Model has been made available to and adopted by a number of different State education agencies. The

National Assessment Model differs from the usual standardized testing program in a number of significant ways. As summarized in Finley (1974), the most important are that NAEP assesses (1) groups rather than individual students, (2) in more than usual depth (6 hours versus 1 hour), (3) in small groups or individually, (4) using methods other than paper-and-pencil items, and (5) with each item designed to be valid in itself.

Approximately 33 States have used some portion of the NAEP model in their own assessments, while ten States have attemped to follow it very closely by using age instead of grade levels, by using similar modes of administration, and by making comparisons with NAEP results. When the COD results become available, the National Assessment of Educational Progress should provide a new level of knowledge about the progress of career education towards the goals of preparing young people for productive and fulfilling careers.

State assessments. Louisiana (1974), following the NAEP model, is assessing a sample of youngsters at ages nine, thirteen, and seventeen in 1975-76.

The State of Missouri between 1971 and 1974 developed instrumentation for a statewide assessment of high school seniors (Missouri, 1975). One of the four major areas to be assessed was career development. Three general goal areas were included: social significance of work, occupational exploration, and occupational preparation.

In Montana, career education has been designated as priority number five out of 15 general educational goals. The Montana Education Assessment Program included a section on careers in the statewide assessment in March 1975. Approximately 6,300 elementary students and 4,800 high school students took locally developed tests in career awareness and awareness of job focus. Participation in the program was voluntary and about 60% of the schools chose to participate.

Since 1972, career education has been one of several top priorities for development in the State of Texas. Subsequently, teachers, students, parents, educators, and business/industry representatives identified "basic" student outcomes for 17-year-olds. These outcomes were organized into nine career education categories and published by the Texas Education Agency (TEA, 1973). Using these categories, the Texas Career Education Measurement Series (CEMS) was designed to support instruction in career education as a measurement and diagnostic system (TEA, 1975a, 1975b). CEMS consists of a battery of 17 instruments--16 tests designed to measure student development in the nine categories and one survey instrument--developed to function as a screening instrument for identifying specific areas of student strengths and weaknesses. A statewide assessment of career education has been planned for the 1975-76 school year.

The Oregon State Department of Education conducted a needs assessment whose results were first published in 1970 (Clemmer, 1970). Of 27 needs surveyed, a major portion of them were related to career education. Of the top ten that emerged after being assigned priorities, most were related to career education. Five years later in a report to the legislature (Oregon, 1975), the continued expansion of career education was given as the number three priority in the State, outranked only by early childhood education and the development of reading skills.

Evaluation information is available at the local level on vocational exemplary projects (Development Associates, 1975a). These projects are considered by many to be the earliest Federally funded efforts to implement the concept of career education on a comprehensive basis. The study included a review of available documents and onsite visits to 50 projects and State education agencies, and focused on grades six, nine, and twelve. Well over half of the teachers and counselors surveyed felt it was important to include career education in the school curriculum. However, neither the activities nor expected student outcomes occurred at the level planned. The reasons for this were generally attributed to the lack of a set of clearly defined objectives, definitions, and managerial requirements and procedures at both the project level and the Federal level.

In Arizona, two comprehensive student-based evaluations involving 3,000 students were made during fiscal year 1976. These evaluations were directed at providing information for management decisions and documented the degree to which students were achieving the goals of career education and the comparative effectiveness of the various career education delivery activities (Arizona, 1974). A comprehensive report is available for the Pima County Project (Behavioral Research Associates, 1975), which involved over 2,500 students in grades four through twelve. That study focused on the counselor-consultant role, student outcomes, and a number of experimental programs involving parents and the community. On most of the indicators used to measure student outcomes, "high involvement" students performed significantly better than in the previous year at all grade levels. On the negative side, it was found that the use of guest speakers had not been very effective at the elementary level. As a result, the way in which guest speakers were used was modified to allow greater interaction between students and speakers.

2.10 Summary

In order to provide context for the interpretation of the data reported in the next four chapters, previous surveys and resource documents related to the present project were reviewed with respect to eight topic areas in career education. Documents of the U.S. Office of Education and the Council of Chief State School Officers were particularly important sources of previous assessment in career education.

At the local level, the implementation of career education was primarily in innovative, exemplary projects, funded to a great extent by Part D of the Vocational Education Amendments of 1968. At the State level, there has been activity in support of career education in nearly every State, although only five States had passed career education legislation as of 1974. A number of national organizations outside the school system have discussed, and to a lesser extent implemented, career education activities.

The attitudes toward career education, especially among students, have been reported to be generally very enthusiastic. There are some reports of concern about this particular educational reform and of resistance to it, but they are vastly outnumbered by the supporters of the concept.

Increased involvement of the work world and of parents both in educational policymaking and as instructional resources has been a conceptual goal of the career education movement. In career education demonstration projects, there has been increased involvement of the community in the schools in virtually every case surveyed.

There is widespread agreement that career education is for all young people, not just for special groups with special problems. Although special efforts are needed to broaden the career opportunities of women, of ethnic minorities, and of the handicapped, that is but one aspect of this educational reform movement. A national consensus on the objectives of career education in terms of student outcomes has been developed (USOE, 1975), along with curriculum practices important to the reform of education. An important and particularly difficult objective of career education is the making of information on manpower needs available to students as input to their career planning. Cooperative ventures between the educational and manpower administrations in several States have begun to meet this need.

The development of instructional materials for career education has been rapid. In addition to the efforts of commercial publishers, school staff members have developed their own materials, and they tend to prefer locally developed noncommercial materials for use in their classrooms. Local development of materials is also an exercise in staff development, which is widely agreed to be essential for firm establishment of the career education movement. A great deal of staff development activity has been reported in the surveys reviewed.

Evaluation is the other topic on which other surveys have focused, and they have found widespread agreement with the necessity for evaluation of career education activities. Implementation of evaluation has suffered from a lack of guidelines and instruments, however. Many evaluations have been fairly superficial, with only rare instances of following up alumni of career education projects to find out what effects their school experiences have had on their work experiences. When the data from the recent National Assessment of Educational Progress in Career and Occupational Development becomes available, there will be a better opportunity to evaluate the ultimate payoffs of career education in terms of better prepared young people.

The basic distinction between earlier surveys and the present project is that whereas they focused on an assessment of exemplary projects and on career education "where it was happening," the current survey of local school districts (see Chapter 3) will provide unbiased estimates of career education-related activity levels in all school districts throughout the country. If the results of the current survey turn out to parallel the results of the earlier surveys, then we might conclude that the activities of exemplary projects are now widely implemented throughout the country. A more likely result is that general activity levels will be lower than in the exemplary projects; however, a third alternative is even more likely, since career education represents an extension of traditional counseling and vocational education activities into new areas: career education-related activities will appear in the current survey to be relatively more frequent in traditional situations (e.g., high schools) and less frequent in innovative settings (e.g., elementary schools) than in the surveys of exemplary projects. In any case, the current survey fills the need not met in the earlier surveys for a survey and assessment of the status of career education as it is available to all young people in the nation.

CHAPTER 3

The Status of Career Education in Local School Districts

3.1 Introduction

In 1974, Congress responded to calls for educational reform and better preparation of young people for the world of work by passing legislation creating the Office of Career Education and a National Advisory Council for Career Education. Ten million dollars were allocated to fund 80 career education demonstration projects across the nation. However, these projects involved activities in only a minute fraction of the nation's 16,000 local school districts. As Congress considered legislation to implement career education on a much wider scale, many important questions needed to be answered; these questions could be answered only by a nationwide survey and assessment of the status of career education in the public schools. In 1974, Congress mandated such a survey in order to answer key questions and to provide a baseline of data against which the future progress of career education could be compared. The major portion of this survey was an assessment of career education activities in 900 nationally representative local school districts, the results of which are presented in this chapter.

The Congressional mandate did not spell out the questions to be answered by the survey; however, six questions are clearly relevant to career education policy considerations.

1. How widespread was career education in the 1974-75 school year?

As a reform of education, career education has obtained growing endorsement throughout the early 1970s. Prior to that, aspects of it were implemented in a few innovative districts. Many of its goals overlap the goals of counseling and vocational education programs. Thus, the answer to this question might be either that most of the school districts were carrying on substantial career education programs, in which case the need for further Federal support might be limited, or that very little had been done in most districts to implement comprehensive career education, in which case further evaluation would be advisable before widespread implementation. Or, the result might be in the middle, indicative of a movement with widespread support in which many attempts at growth were underway, in which case significant Federal support at the present might play a critical role.

Progress in career education may be expected to be rapid. The impact of current and future legislation cannot be evaluated without determining the present level of career education. The need for an answer based on a carefully selected nationally representative sample is clear.

2. What activities were typical of career education programs at each grade level, and what activities were lagging in implementation?

Career education is a lifelong process, and in particular, it involves activities for students in elementary, middle, and secondary grades. In order to compare actual practice to the conceptualization of career education, it is necessary to assess which of its various facets are most prevalent. Only from a comprehensive definition of career education will it be possible to understand what it means to "implement a career education program."

The definition of career education contained in Public Law 93-380 includes several different facets. The assessment of the frequency of each category of activity is necessary to determine which, if any, need special exhortation and inducement for inclusion in career education in practice.

3. To what extent have school administrators, guidance counselors, teachers, parents, and members of the business, labor, and industrial community played important roles in local career education programs?

A prime aspect of career education as a reform is the reduction of barriers within schools (e.g., vocational education vs. academic education) and between schools and the rest of society. This is to be accomplished by bringing all members of the community together to play complementary roles in the preparation of young people for their futures in the world of work. It is important to ascertain the extent to which career education implementation has involved each segment of the school district staff and representatives of the community. If certain roles are especially significant, steps should be taken to assure their full participation in career education programs in every school district; if some roles are not being filled as frequently as expected, steps should be taken to encourage participation of individuals in those roles. Although vocational educators and counselors have long been concerned with career development, the participation of all teachers is necessary to establish the relevance of "the subject matter of the curricula of the schools to the needs of young people to be prepared to function in society" (P.L. 93-380, Section 406:d:2).

4. Was career education provided equally to young people in all segments of society?

The importance of this question is reflected in the repeated reference to "all children" and "every child" in the career education enabling legislation. Career education attempts to broaden the opportunities for all students to develop careers that will be individually rewarding and fulfilling to them. Because it bridges the gap from school to the world of work, any inequality in providing career education is likely to be followed by serious inequalities throughout the later working lives of the nation's students.

A particularly potent concern for equality stems from the misconception that career education implies a lowering of career aspirations as they are made more realistic, so that greater exposure of disadvantaged groups to career education will work against their struggle for equality. If career education has been implemented equally in all sectors of our society, then such concerns can be allayed. Where inequalities are present, however, steps must be taken to achieve equality and possibly to reexamine the appropriateness of the objectives of the movement for all segments of society.

5. How widespread in the schools were special efforts to broaden the career opportunities of the physically handicapped, the mentally retarded, the gifted, women, and members of ethnic minorities?

Because of the special problems encountered by each of these groups in preparing for the world of work, it has been a goal of the career education movement to promote activities in the schools to deal with the problems of each group, whether they be special classes or the removal of stereotypes from materials used with students. Concern for special target groups was explicitly included in the legislative foundation for career education. If local school districts have included such emphasis in their career education programs, then even stronger legislative direction is not needed and the districts are to be commended; if, on the other hand, such emphasis is not central to career education in practice, more inducement for local programs to implement these efforts may be needed. It is clearly important to know whether the practice of career education has incorporated this goal.

6. What factors do local school districts see as critical for the success of career education in practice, and what are the critical problems they have had in implementing career education?

> In order to contribute to the national dialogue on career education, the survey respondents were asked to describe their perceptions of the status of career education programs in their districts, to express their agreement or disagreement with the objectives of career education contained in the U.S. Office of Education's policy paper, and to state their needs and priorities for further Federal and State support. The insights provided by their perceptions are clearly important in planning future Federal activities in career education: success factors should be encouraged widely, and difficulties should be addressed by specific remedial plans.

These questions guided development of the survey instrument, and the results of the survey are presented as they relate to these questions. As with any rich data base, analyses of the responses to the survey are certainly not limited to answering these questions. Several tangential results are discussed in this chapter; and the results are interpreted in Chapter 8 as they relate to the nine specific legislative recommendations in the Interim Report of the National Advisory Council for Career Education in November 1975. Other secondary analyses are certainly desirable to achieve the maximum return for the efforts of the local school districts in responding to the survey and the Federal expenditure to conduct the survey.

Two limitations of this survey need to be pointed out to those who may have had unwarranted expectations concerning information to come out of the survey. First, there was no attempt to ascertain the payoffs of career education in terms of more successful functioning in society by graduates of career education programs. Such evaluation is, however, extremely important at this time because of the move toward widespread implementation and because of the long term effects of career education programs on the careers of their graduates. Use should be made of existing longitudinal data bases such as Project TALENT and the National Longitudinal Study of the High School Class of 1972 to lay a foundation for evaluation, and efforts to implement an evaluation need to be begun at an early time in order to provide the necessary evaluative data before the end of the decade. Second, the survey relied on self-report questionnaires, rather than in-depth onsite observations. Although there is every evidence that the respondents completed the questionnaires conscientiously, there is room for subjective judgment on several questions. A careful reading of the entire questionnaire (in Appendix B) will indicate the specific data underlying the summary tables in the text. In order to alleviate the self-report problem, a "special sample" of sixteen school districts with extensive career education programs was selected, and telephone interviews were conducted with up to 34 individuals in each district to assess critical factors for the success of those programs and the critical problems they faced. The results of this telephone survey are summarized in Section 3.10.

3.2 *Methodology*

Sample. The purpose of this sample was to provide a *representative* picture of the status of career education as it was being delivered to students across the country. School districts were chosen from four geographic regions of the country and from central cities, suburbs, and areas outside metropolitan areas, in direct proportions to the numbers of students in the populations of these areas. For example, because 13.2% of the nation's students are in suburbs in the Northeast, 13.2% of the districts chosen for the sample were in suburbs in the Northeast, and because 3.9% of students are in central cities in the Southeast, 3.9% of the districts chosen for the sample were in central cities in the Southeast.

There were two reasons for this design. First, and most important, it makes possible straightforward interpretations of the results of the survey in terms of percentages of the nation's students served. For example, if 47% of the responding districts answer "yes" to a survey question, that means that, up to the level of statistical precision, 47% of the nation's students were in districts in which that question would be answered "yes." Such inferences would not be possible if each school, the very large and the very small, were equally likely to be in the sample; if the results are to be interpreted in terms of the nation's students, *districts must be chosen with probability proportional to the number of students they serve*. The second reason is that the jurisdictional territory of school districts varies dramatically between States. One midwestern State has only .73% of the nation's students but has 7.84% of its local school districts, and one eastern State has 2.03% of the nation's students but only .15% of its school districts, the ratios of students to districts differing by a factor of more than 100 between these two States. Because the purposes of career education are service to the nation's *students*, it would be unfortunate to arrive at biased conclusions based on the divergence of meaning of "school district" across the country.

This sampling method is not without political implications. If conclusions are reached and policies and funding are allocated completely according to the number of students served, the effect would be, and has proven in the past to be, detrimental to the least populated regions of the country. Some types of activity, such as having a local career education coordinator, having an advisory committee, or writing a formal policy paper cost nearly the same for districts with 100 or 100,000 students. The policy implications of the data must not be considered uncritically. On the other side of the coin, it is the dense urban centers in which the need for educational reform has been most sorely felt.

The size of the sample was determined by the constraints that (1) it be as small as possible to minimize the efforts required of the nation's educational personnel in participating in the survey, and (2) after allowing for expected nonresponse, the data base be sufficient to support precise statements of conclusions. Because of the sampling method employed, school districts with more students were proportionally more likely to be in the sample. A by-product of this sampling method was a great savings of effort on behalf of the nation's school districts: although the sample chosen actually served 39% of the nation's students, it consisted of under 6% of the nation's school districts.

The degree of precision desired was such that in a comparison of any two groups of school districts, each representing one-tenth of the sample, differences of 15% or more would be significant at the 95% level of confidence. This precision requires a sample size of at least 854. Allowing for a reasonable rate of nonresponse of 15%, this would normally require a sample of about 1,000; because of the contractor's experience with practical survey methods, however, a sample of only 900 school districts was chosen, allowing for no more than a 5% nonresponse rate. As can be seen in Tables 3.1 and 3.2, that goal was achieved, thanks to the high level of cooperation of local school district staff across the country, of the Chief State School Officers and State Career Education Coordinators, and of the U.S. Office of Career Education. The combined average daily membership of the districts responding to the survey was over 16,700,000 students.

The figures in Table 3.1 show how many of the districts were chosen from the Northeastern, Northcentral, Southeastern, and Western states and from metropolitan central cities, suburbs, and places outside metropolitan areas. In addition, it shows the number of districts that were small (average daily membership ≤ 5,000), large (average daily membership > 20,000), and in between. A constraint on the sampling plan was that the single districts in Hawaii and the District of Columbia be included along with at least three districts from each of the other 49 States. This was accomplished by (1) determining how many districts should be included from each stratum, (2) randomly choosing 149 districts so that there would be three in each State and one in Hawaii and the District of Columbia, and (3) choosing the remaining 751 of the 900 to fill out the cells in the design without regard to State. As a result, the number of districts included from each State, shown in Table 3.2, was at least four and was related to the State population, roughly one district for every 50,000 students. In addition to the 900 school districts in the 50 States and District of Columbia, six outlying Territories of the United States were requested to respond to the survy.

The original sampling plan included stratification by median family income in the school district (high, medium, and low). However, because the necessary data were not readily available from the National Center for Educational Statistics, who did supply the computer tape from which the sample was chosen, this factor was deleted from the sampling plan. Comparisons

Table 3.1

Demographic Breakdown of the Sample as a Function of Size, Type of Community, and Region

Average Daily Memberships	Type of Community	Selected					Respondents					Nonrespondents				
		NE	NC	SE	W	Total	NE	NC	SE	W	Total	NE	NC	SE	W	Total
≤5,000	Central City	4	3	0	4	11	4	2	0	4	10	0	1	0	0	1
	Suburb	54	48	10	28	140	49	46	9	26	130	5	2	1	2	10
	Outside	32	63	44	42	181	31	62	42	40	175	1	1	2	2	6
	Total	90	114	54	74	332	84	110	51	70	315	6	4	3	4	17
5,000< and ≤20,000	Central City	39	22	10	25	96	36	22	10	25	93	3	0	0	0	3
	Suburb	59	47	25	56	187	56	45	24	55	180	3	2	1	1	7
	Outside	7	18	45	11	81	7	18	41	11	77	0	0	4	0	4
	Total	105	87	80	92	364	99	85	75	91	350	6	2	5	1	14
20,000<	Central City	18	38	25	44	125	15	37	24	42	118	3	1	1	2	7
	Suburb	6	10	38	24	78	6	10	36	24	76	0	0	2	0	2
	Outside	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	Total	24	48	64	68	204	21	47	61	55	195	3	1	3	2	9
Total	Central City	61	63	35	73	232	55	61	34	71	221	6	2	1	2	11
	Suburb	119	105	73	108	405	111	101	69	105	386	8	4	4	3	19
	Outside	39	81	90	53	263	38	80	84	51	253	1	1	6	2	10
	Total	219	249	198	234	900	204	242	187	227	860	15	7	11	7	40

Note. A central city was defined, according to the U. S. Bureau of Census Standards, as having a population greater than 50,000 and not being a "suburb" in the metropolitan area of another central city. A suburb is a city in the metropolitan area of some central city. "Outside" refers to localities outside any metropolitan areas.

Table 3.2

State Breakdown of the Sample of Local School Districts

	Selected	Respondents	Nonrespondents	Total ADM in state (thousands)	Total districts in state
Alabama	15	14	1	756	126
Alaska	4	4		84	32
Arizona	11	11		490	276
Arkansas	12	12		430	383
California	82	79	3	4,658	1,045
Colorado	12	12		568	181
Connecticut	17	17		658	165
Delaware	4	3	1	132	24
D. of Columbia	1	1		139	1
Florida	22	21	1	1,485	67
Georgia	25	23	2	1,071	188
Hawaii	1	1		179	1
Idaho	5	5		184	115
Illinois	40	38	2	2,255	1,057
Indiana	25	25		1,159	304
Iowa	14	13	1	650	451
Kansas	10	10		481	309
Kentucky	14	14		697	188
Louisiana	18	16	2	819	66
Maine	8	7	1	241	230
Maryland	11	10	1	914	24
Massachusetts	32	29	3	1,182	356
Michigan	39	36	3	2,007	593
Minnesota	19	19		904	438
Mississippi	11	9	2	517	150
Missouri	19	19		997	576
Montana	7	7		177	650
Nebraska	7	7		329	1,281
Nevada	4	4		131	17
New Hampshire	7	7		169	156
New Jersey	35	30	5	1,490	579
New Mexico	5	5		276	88
New York	47	45	2	3,474	734
North Carolina	24	23	1	1,131	150
North Dakota	5	5		141	336
Ohio	45	44	1	2,382	621
Oklahoma	12	11	1	598	637
Oregon	12	12		465	338
Pennsylvania	46	44	2	2,306	504
Rhode Island	6	6		188	40
South Carolina	13	11	2	616	93
South Dakota	6	6		160	220
Tennessee	16	16		880	146
Texas	54	51	3	2,677	1,120
Utah	7	7		305	40
Vermont	5	5		106	245
Virginia	19	19		1,058	134
Washington	14	14		784	314
West Virginia	9	9		408	55
Wisconsin	20	20		994	434
Wyoming	4	4		85	60

that are made between "affluent" and "economically disadvantaged" districts in Section 3.6 are based primarily on data provided by the local school districts in the sample.

A final note on sample selection: The sample was chosen to be representative of the status of career education throughout the nation; therefore, the sample was purposefully chosen completely without regard for the level of career education implementation in the districts. Thus, many outstanding programs were not included; this survey shows what the overall status of career education was in 1974-75, not what it can or should be.

Survey Instrument. The survey instrument was designed to provide a concise picture of the types and amounts of career education activities occurring in local school districts, in such a way that objective comparisons could be made across groups of school districts. The first goal in the design of the survey instrument was to span the possible types of activities and levels of commitment. A second goal was to avoid the confusion which recurs in many sources between career education and vocational education. In many districts, much of career education has been considered to be part of vocational education, although a conceptually rigorous definition of career education encompasses vocational education. A third and critical goal was that the instrument be as brief as possible.

To ensure that the full range of career education activities and purposes were included in the questionnaire, a number of functional definitions of career education were used as guidelines, including the part of Section 406 of Public Law 93-380 that states:

> (a) It is the sense of Congress that--
>
> (1) every child should, by the time he has completed secondary school, be prepared for gainful or maximum employment and for full participation in our society according to his or her ability;
>
> (2) it is the obligation of each local educational agency to provide that preparation for all children (including handicapped children and all other children who are educationally disadvantaged) within the school district of such agency; and
>
> (3) each State and local educational agency should carry out a program of career education which provides every child the widest variety of career education options which are designed to prepare each child for maximum employment and participation in our society according to his or her ability.
>
> (b) It is the purpose of this section to assist in achieving the policies set forth in subsection (a) by--
>
> (1) developing information on the needs for career education for all children;
>
> (2) promoting a national dialogue on career education designed to encourage each State and local educational agency to

> determine and adopt the approach to career education best suited to the needs of the children served by them;
>
> (3) assessing the status of career education programs and practices, including a reassessment of the stereotyping of career opportunities by race or by sex;
>
> (4) providing for the demonstration of the best of the current career education programs and practices by the development and testing of exemplary programs and practices using various theories, concepts, and approaches with respect to career education;
>
> (5) providing for the training and retraining of persons for conducting career education programs; and
>
> (6) developing State and local plans for implementing career education programs designed to insure that every child has the opportunity to gain the knowledge and skills necessary for gainful or maximum employment and for full participation in our society according to his or her ability.

Other resources used were An Introduction to Career Education (USOE, 1975), A Taxonomy and Profiles of Career Education (PSE, 1974), and career education and related assessment instruments provided by the Michigan, California, Minnesota, and Oregon state education agencies, by the staff of the U.S. Office of Career Education, and by the staff of the American Institutes for Research evaluation of Right-to-Read projects.

The forty items on the questionnaire were grouped into three sections for the convenience of respondents: activities, policies, and opinions. The approximate correspondence between items on the questionnaire and the six key questions are shown in Table 3.3.

In order to minimize confusion in use of the term "career education," three steps were taken: (1) a tentative definition based on the USOE policy paper (USOE, 1975) was included on the introductory page of the questionnaire, (2) the phrase "help students to learn about and prepare for work" was used in place of "career education" in many items, and (3) vocational education was explicitly differentiated from career education in items which might otherwise be misinterpreted. The goal of the survey's assessment of activities was to include all activities that might fall under the scope of the general sense of Congress expressed in P.L. 93-380, Section 406. The assessment of policies was undertaken to determine both the frequency of formal career education programs and the effect of these programs on the amount of activity in the schools directed at preparing young people for the world of work.

Procedures. A major problem in this and other surveys is to obtain a high response rate. Studies of nonrespondents typically show that if the response rate is low, the results tend to be biased (i.e., the persons who do not respond are not like those who do). A valid reason for a low response rate in the case of educational institutions is the fact that they receive many questionnaires each year asking for similar information. There-

Table 3.3

Correspondence of Instrument to Key Questions

Item	Key Questions	Item	Key Questions
Section 1		Section 2	
1	2,4	23	1,2,4,6
2	2,6	24	1,2,4,6
3	2,4	25	1,2,3,4,6
4	2,4,5	26	1,2,4,6
5&6	2	27	1,2,3,4,6
7	2,4,5	28	3
8	2,6	29,30,31&32	4
9			
10	2,6	Section 3	
11&12	5	33,34&35	6
13	4	36	1,4,6
14	5	37	2
15	5	38	2
16&17	5	39&40	
18&19	3		
20	3,6		
21	1,2,3,4		
22	1,2,3,4		

fore, a systematic yet sensitive procedure was necessary to assure an adequate response rate for this survey. The administration procedures were designed according to two principles: (1) establishing the primacy of this particular survey, which was mandated by Congress, and (2) contacting respondents in ways that would be likely to promote cooperation.

Because of the significant effort to respond required of local education agency staffs in all 50 States, the Council of Chief State School Officers (CCSSO) was consulted concerning methods for minimizing local staff efforts. CCSSO provided valuable assistance throughout the survey. In the two months prior to the survey, each State education agency was contacted twice, was informed of the survey, and was asked for assistance in achieving a high response rate in the State. Two States expressed concern over the planned methods for contacting local school districts; the survey in these States was carried out according to their prescribed wishes. The State education agencies were very helpful, especially in the later stages of the survey, when local education agency staff needed assurance of the importance of this survey.

Four interviewers were trained and given access to all information collected in the preliminary steps. Each interviewer was assigned 225 school districts and made personal telephone contact with each over a period of three weeks. All phases of the contact with a school district from the initial telephone call to receipt of an adequately complete questionnaire were the responsibility of the interviewer to whom it was assigned (with a few exceptions of convenience).

On first contact with a school district, the interviewer called the Superintendent's office, informed the Superintendent or his or her representative about the survey, obtained the name of the person in the district most appropriate to complete the questionnaire, and contacted and informed that individual about the survey and the questionnaire scheduled to be sent to him or her that day. The Curricular Information Center in Denver, Colorado, provided a list of the names and telephone numbers of superintendents and career education coordinators for the sample districts.

If a response (completed questionnaire) was not received within three weeks of the initial contact, the interviewer made a reminder call, and if necessary, a second questionnaire form was sent. If a response had not been received nine weeks after initial contact, an attempt was made to administer the questionnaire by telephone interview. The person responsible for completing the questionnaire was called and an appointment for conducting a telephone interview was requested; in most cases the interview was conducted immediately.

Analyses. In the next six sections, the responses of the 860 respondents are presented and interpreted. The analyses presented are exclusively tabulations, with one major exception: two a priori scales of overall career education implementation were constructed from the questionnaire, and many items were correlated with these measures. The two scales are the overall career education activity level (OCEA) and the overall career education policy acceptance level (OCEP).

It was necessary to start with two scales because of a possible dichotomy in career education that must be studied: career education in name and career education in fact. It is to be hoped that these two entities will converge, but career education is a complex concept developed from diverse origins with an imposed delay in development of a rigid definition. Therefore, many school districts have been carrying on career education activities without formal policy statements, in some cases to a greater extent than districts whose formal policies are directly based on the formal definition of career education set forth by the U.S. Office of Education. The two a priori scales are, then, overall career education activity level (OCEA) and overall career education policy acceptance (OCEP). If, in fact, these scales were to prove not to be highly correlated, it would present a serious substantive problem for the career education movement; however, as defined initially a priori, the correlation between them was .65, so this is not a serious problem. The initial a priori definition of the scales is given in Figure 3.1. The multipliers for the scales are to make the ranges vary from 0 to 100. The distributions of scores in the sample are shown in Figure 3.2.

The reliability of this version of OCEA is at least .85, and of OCEP is at least .80, as estimated by Kuder-Richardson formula 21 (coefficient α). The meaning of these high coefficients of reliability is that there is a unitary concept being assessed by each of these scales; the activities are not a haphazard set but tend to occur or not occur in clusters within the school districts, and similarly for the policies. That is not to say that every activity and policy assessed in the survey is central to career edu-

OCEA = (number of items checked on question 1 [0 to 17]

+

number of activities checked for at least one grade level on question 7 [0 to 8]

+

number of topics with some activity checked on question 21 [0 to 15]

+

number of activities reaching nearly all students in at least one grade level on question 22 [0 to 15]),

multiplied by (5/3).

OCEP = (number of practices in effect in 1974-75 checked on question 4 [0 to 8]

+

number of "yes" answers to questions 23 through 27 [0 to 5]

+

number of items checked on question 36 [0 to 7]),

multiplied by 5.

Figure 3.1. Operational definitions of two scales of career education implementation. (Note that the questions referred to are contained in the survey questionnaire and can be found in Appendix B.)

cation; an analysis of the item-correlations provides a means for sorting the crucial activities and policies from the peripheral ones.

Because of the very high response rate and the fact that the nonrespondents did not tend to cluster in any sector of the sample, the results for the respondents are analyzed without regard to the nonrespondents. Telephone interviews with 30 of the 40 nonrespondent school districts indicate that these districts were, if anything, carrying out more career education activities than the 860 respondents. To understand the maximum amount of distortion that could possibly occur because of the nonresponse bias, suppose that, say, 86% of the respondents answered "yes" to a particular question and only 10% of the nonrespondents would have answered "yes" had they responded; in this case, the true estimate is 82.6%. This error is much smaller than any differences worth considering as significant.

Because of the vitally important distinction between percentages of the 16,000 school districts with career education and percentages of the 45,000,000 students who were in districts with career education, percentages stated in the results section of this chapter are referred explicitly or implicitly to students or districts. When percentages are referred to "the responding districts," they refer to percentages of the nation's students,

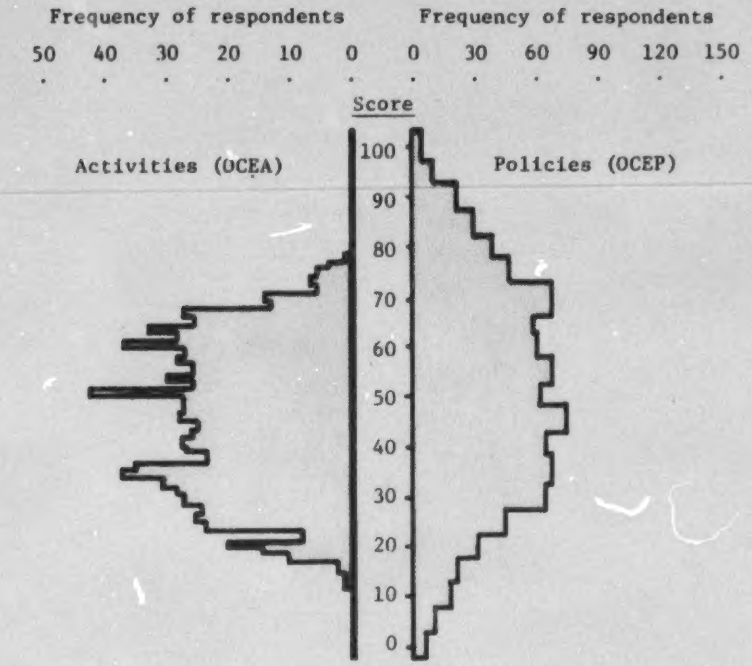

Figure 3.2. Frequency distributions of overall career education activity and policy scores.

because each responding district represented 1/900 of the nation's students. The analyses primarily focus on percentages of students exposed to career education, putting the emphasis where the nation's career educators clearly intend.

3.3 How widespread was career education in the 1974-75 school year?

Because of the diverse concepts of career education, it is meaningless to estimate the number of school districts that "have career education" or the number of students "engaging in career education." The distributions of the two indices of career education implementation, activities and policies, can be seen in Figure 3.2 to vary smoothly from 13 to 80 on a scale from 0 to 100 for activities and across all values of the policy scale. The majority of the nation's students were in districts in which some of the activities and policies of career education were in effect.

A much more precise answer is necessary and is provided by a consideration of particular staff development activities, particular policies, and particular student learning activities. The meaning of a high frequency of a particular activity must be interpreted cautiously, however. It may be an indication of widespread adoption of an innovation or it may be an indication that that activity was widespread prior to the current career education movement. Certainly, there have been guidance counselors and vocational educators in the nation's high schools for decades, and 57% of the school districts in the country reported, according to this survey, that activities to help students learn about and prepare for work have been carried out by these individuals for some time now. The National Defense Education Act that was passed during the Sputnik era, for example, directed an emphasis on guidance counseling in the schools, intended in that case to identify individuals with particular professional career potentials. The emphasis of the current career education movement is quite different, focusing on the benefits to society if all young people are helped to prepare for productive and rewarding careers that relate to their individual values, interests, and abilities. This presents a problem in isolating innovative career education activities from other, similar activities of counselors and teachers when estimating the amount of career education occurring. As one solution to this problem, the discussion of particular activities in this section focuses on those activities that correlate highly with the overall measure of career education activity and on activities characteristic of districts with formal written career education policy statements.

Those particular activities are the most plausible indicators of a comprehensive programmatic implementation of career education for all students in a district.

Staff development activities in career education were taking place in 57% of the nation's school districts in 1974-75. Only 31% of the nation's 45 million students were in school districts in which there were no such activities for the staff. The frequencies of these activities in five topic areas are shown in Table 3.4. The percentages of teachers, guidance personnel, and school administrators in the country who participated in staff development activities in career education is estimated in Table 3.5.* There was greater activity at the higher grade levels due to guidance personnel participation; about one in every five teachers and two in every five administrators participated in these activities, at each grade level.

Table 3.4

Percent of Students in Districts with Various Types of Career Education Staff Development Activities [Q21]

	Career Education Topics				
Methods	Concepts	Teaching techniques	Curriculum materials	Evaluation techniques	Community resources
Internal staff activities					
Presentations by local school staff experts	40	35	32	20	26
Group sharing sessions among school staff	37	31	30	19	23
Locally prepared staff development materials	34	33	38	23	31
External educational resources					
Attendance at paraprofessional meetings	42	28	28	17	15
Published staff development materials	36	28	35	17	16
Presentations by State Career Education experts	36	27	28	20	16
Presentations by experts from institutions of higher learning	31	24	21	15	15
Visits to other Career Education sites	29	23	23	13	14
Summer sessions at college	23	18	17	10	10
Workshops by professional organizations	22	16	16	9	9
External non-school resources					
Visits to business/labor/industry or other community sites	31	16	18	7	30
Presentations by experts from business/labor/industry	23	14	18	5	25
Work experience in fields outside education	16	9	10	4	11
Workshops by private firms	8	8	8	4	6
All methods combined	66	67	67	66	65

---

*This estimation is based on the assumption that each survey respondent, in representing an equal number (50,000) of students in his/her and similar districts, also represents an equal number of teachers, counselors, administrators, etc., in his/her and similar districts.

Table 3.5

Average Percentage of School Personnel Participating in Career Education Staff Development [Q18]

Classification of school personnel	In school districts without career education policies	In school districts with career education policies	Overall
Elementary teachers	14%	29%	19%
Middle school teachers	15%	29%	20%
High school teachers	14%	26%	18%
Elementary guidance	13%	28%	18%
Middle school guidance	23%	49%	36%
High school guidance	30%	53%	41%
Elementary administrators	23%	39%	26%
Middle school administrators	17%	43%	30%
High school administrators	21%	42%	30%
Paraprofessionals	8%	17%	11%
Librarians	17%	31%	22%
Health workers	6%	12%	8%
Social workers	3%	8%	5%

Note. These are global estimates, averaged over the survey respondents, each of whom represented approximately an equal number of students and by extrapolation approximately an equal number of staff.

In 1974-75, boards of education in 27% of the nation's districts had adopted or were planning to adopt a formal written policy with regard to career education, 18% had at least one full time staff member in career education, and 21% had an Advisory Committee for Career Education. These and related results are shown in Figure 3.3. In this and several other figures throughout the chapter, percentages both of the nation's students and of the nation's districts are included. In most cases, career education activities were reaching larger percentages of the nation's students than of the nation's local school districts. This is primarily because there was significantly greater career education activity in those districts that served the largest numbers of students (see Section 3.6). The reasons for not having a formal career education policy are shown in Figure 3.4. The most common reasons were funds, other problems, and success of career education without a formal policy. Only 11 of the 860 (1%) respondent districts had considered and rejected career education. Among the districts with formal career education policies, fewer than half included specific student outcome objectives or

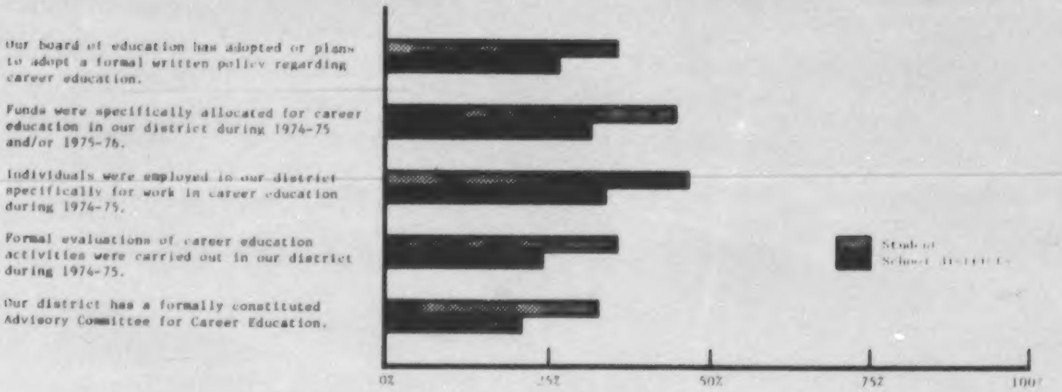

Figure 3.3. Percentages of school districts and of students in school districts with various career education policies [Q23-27]

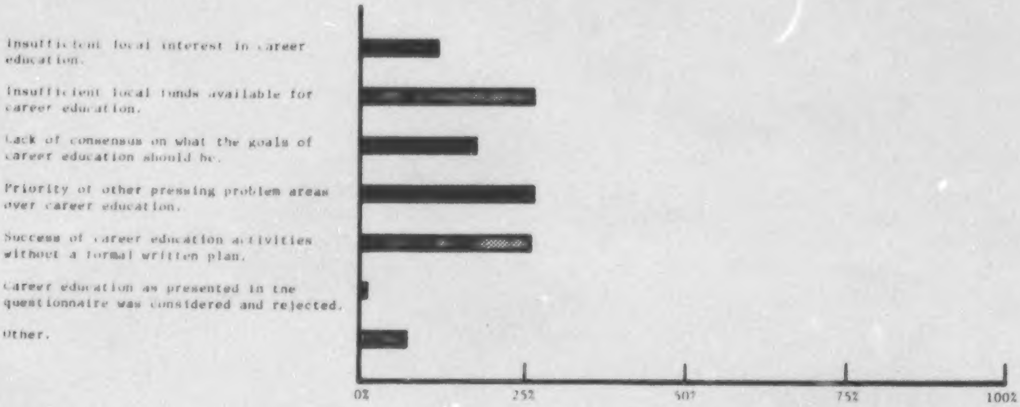

Figure 3.4. Percentages of school districts giving various reasons for not having a career education policy statement. (Note that more than one reason could be given by a respondent.) [Q23]

plans for evaluating career education activities, as shown in Figure 3.5. Interestingly, as shown in Figure 3.6, there were 50% more districts that had Vocational Education Advisory Committees considering how to help students learn about and prepare for work than that had Career Education Advisory Committees. Eighty-five percent of the nation's students were in school districts in which individuals from business, labor, industry, and government were used as a resource in the instructional program, and 59% were in districts where students, teachers, parents, and members of the business, labor, and industrial community were involved in educational policymaking. The percentages of the nation's students and of the nation's school districts experiencing these and other policy innovations supported by the leaders of the career education movement (USOE, 1975) are shown in Figure 3.7.

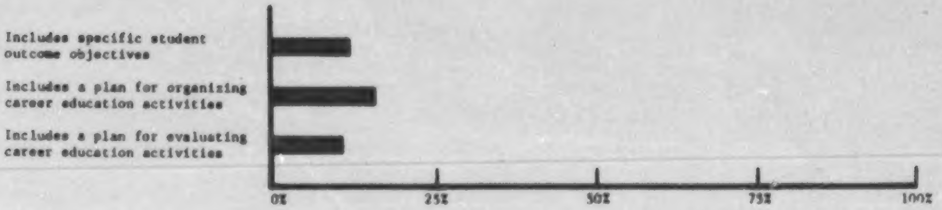

Figure 3.5. Percentages of school districts with a policy statement including various plans [Q23].

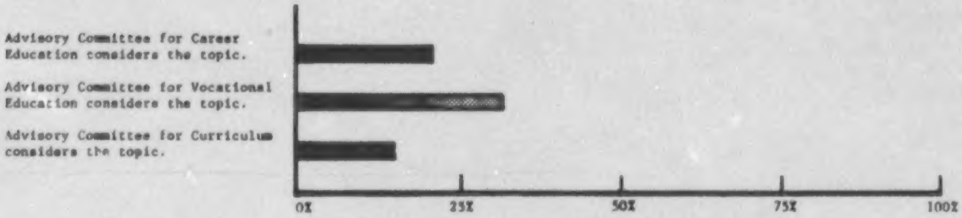

Figure 3.6 Percentage of districts in which different advisory committees consider how to help young people learn about and prepare for work [Q27].

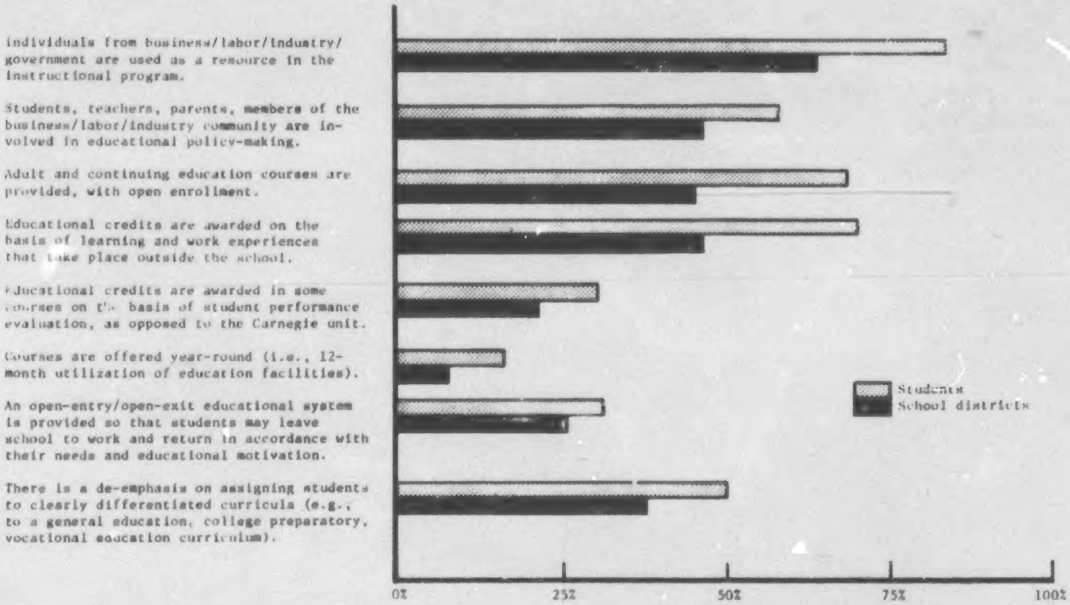

Figure 3.7. Percentages of students and of school districts with various educational practices in effect [Q4].

The final criterion for the spread of any educational reform movement is the number of students participating in relevant learning activities. One question on the survey (#22) asked how many students at the elementary, middle, and secondary grades participated in each of 15 activities in the responding school districts. Averaging over all respondents, whether or not they had formal career education policies, the percentages of students across the country participating in each activity are shown in Figure 3.8. The percentages for elementary students range from 3% to 30%, for middle

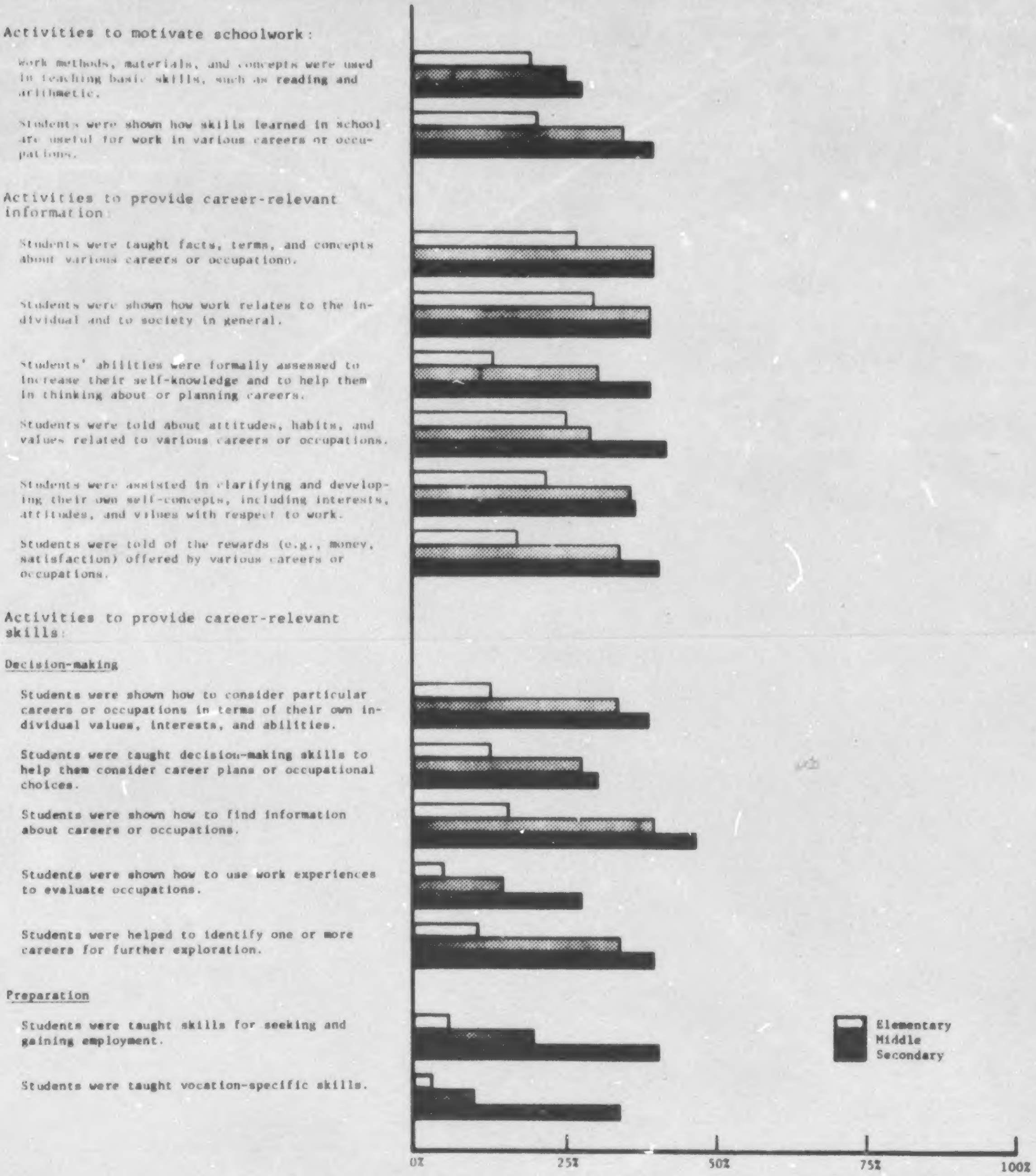

Figure 3.8. Students involved in fifteen career education activities at three grade levels [Q22].

level students from 10% to 40%, and for secondary students from 28% to 47%. These percentages undoubtedly included many traditional counseling activities. More precise results can be obtained by focusing on the activities that were most central to career education, (1) in terms of their correlations with the overall activity measure and (2) in terms of their correlations with whether the district had a formal written policy on career education. At the elementary level, the most central activity was the developing and clarifying of students' self-concepts, including interests, attitudes, and values with respect to work. Approximately 21% of all elementary school students participated in this activity. At the middle grade level, the same activity was still central, and about 36% of middle grade students participated. At the secondary level, the most central activity was the learning of decision-making skills needed for making career plans and occupational choices. About 31% of secondary students nationwide participated in this activity. In districts with formal career education policy statements, these three percentages were 31%, 40%, and 35% respectively.

It is not a simple or easy task to summarize these results, because, as many sources have pointed out, there is no clear boundary between career education and other activities in the school and community. In many cases, career education represents a restructuring of attitudes and content of activities that were already ongoing. While nearly half of the nation's school districts involved the community in educational policymaking, only one in five had Career Education Advisory Committees, and while over half of the districts reported staff development activities in career education, fewer than one in five had even one full-time career education staff person. Only 3% of the nation's students were in districts that had taken all five policy steps assessed in the survey. Although 52% of the nation's students were in districts where at least one of the 15 career education learning activities was broadly implemented,* only 21% were in districts where over half of the 15 activities were broadly implemented, and only 3% were in districts with all 15 broadly implemented. Generally more students participated in specific career education learning activities at the secondary level than at the elementary level (see Figure 3.8), but activities at the elementary level were slightly more correlated with overall levels of career education implementation and with the existence of a career education policy statement.

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*An activity is defined as "broadly implemented" if nearly all students in at least one of the three grade levels participated in that activity.

These conflicting results indicate that career education in practice is far from a unified concept. Discussion of career education was widespread in 1975, but widespread formal implementation was just beginning. According to a respondent, "The philosophies and concepts of career education should be the underlying objectives of all education: the development of decision-making skills; emphasis on future goals and alternatives; acquisition of a marketable skill for ALL students." Thus far, this has been put into actual practice by very few districts. Many of the component activities and objectives of career education, in particular guidance counseling and vocational training, had usually been in effect prior to the development of a comprehensive districtwide career education program. While most high schools had traditionally aimed to prepare students for either postsecondary education or the world of work, the generalization of that goal to elementary schools, the infusion of career education into academic curricula, and the specific concern for the career development process at all stages for every student was new and being implemented only gradually. Sixty percent of the survey respondents agreed with the statement that their "efforts are now limited but may increase as the gains brought about by the current career education movement become apparent." As one Director of Guidance said, "I feel that it is more important to offer students vocational skills sufficient to gain entry into the world of work than it is to have coordinators and/or highly sophisticated career education programs." Because of the continuing evolution of the concept of career education, a generalized answer to the question "How far have we come, and how far do we have to go?" is impossible; however, a rough estimate is that, starting from the educational framework of the late 1960s, the nation has moved about 15% of the way toward the goal of comprehensive career education for all young people.

3.4 What activities were typical of career education programs at each grade level, and what activities were lagging in implementation?

In order to answer these two questions, it is necessary to categorize career education activities. First, there are three general purposes of career education activities: to improve the quality of experiences in the schools, to improve the preparation of all young people for the world of work, and to reduce the barrier in each person's life span between school and work. The ratings in Figure 3.9 show the opinions of nine potential student outcomes of career education held by the survey respondents. The highest rating was for the objectives for improving the quality of school experiences; the lowest ratings, although still high, were for the objectives related to education during the work years; and the objectives aimed specifically at preparing young people for choosing, pursuing, adapting to, and being fulfilled by careers were rated in between.*

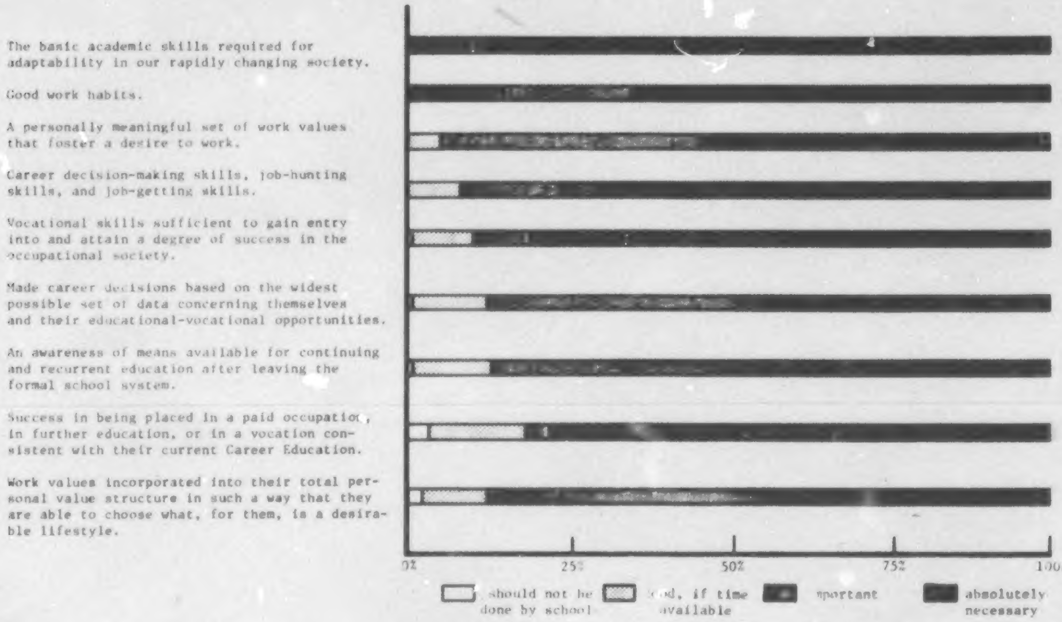

Figure 3.9. Frequencies of ratings of the importance of student outcomes for career education by the survey respondents (Q37).

The activities in Figure 3.8 refer primarily to preparation of young people for the world of work. The two exceptions, using work methods and resources to teach basic skills and explaining how skills learned in school are relevant to careers, were relatively more frequent at the elementary level than most other activities, indicating that general improvement of experiences in the schools is a more frequent aspect of career education at the elementary than the secondary level. Among the activities to aid career development, six involved primarily the transmission of information and seven the imparting of skills. In general, the informational activities were more prevalent among the younger students, but among older students there were equal amounts of information and skill learning. All career education-related activities appeared to be more frequent in high schools; however, some activities tended to occur more than others within each grade level. The activities most closely associated with each grade level are shown in Table 3.6.

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*The categorization of these objectives and of other career education components is not intended to be final or normative but rather to serve as a tool for summarizing the results of this survey.

The activities that were relatively lagging in implementation, among those most highly correlated with overall career education implementation, were: at the middle and secondary levels, the teaching of decision-making skills to improve career planning, and at the secondary level, the teaching of how to use work experiences to evaluate occupations and the teaching of basic skills through the use of work-related methods and resources. The lagging activities were those that required the relatively greatest change in approach. Development of aids for these types of activity might be useful for the local school districts.

The frequencies of support activities are shown in Figure 3.10. These activities were reported significantly more frequently at the secondary than at the elementary level nationwide. However, the effects of the existence of a formal career education policy statement were primarily to increase activities at the elementary level; and except for the establishment of school Career Education Centers and assisting parents in career guidance for their children, activities at the elementary level tended to be more highly correlated with overall implementation of career education than activities at the secondary level. These results suggest that although the support activities had been carried on at the secondary level prior to the current career education movement, the movement has caused an increase in the number of activities supporting career education at the elementary levels in particular. The single support activity most correlated with overall career education activity was the development of materials locally

Table 3.6

Career Education Activities Whose Student Participation Was Relatively Most Closely Related to Grade Levels When It Occurred

Elementary	Middle	Secondary
Learning facts, terms, and concepts about various careers.	Having abilities assessed to increase self-knowledge and help.	Learning how to use work experiences to evaluate careers.
Learning how work relates to the individual and to society.	Learning how to consider careers relative to their own interests and abilities.	Learning about the rewards offered by various careers.
Learning about attitudes, habits, and values related to careers.	Learning decision-making skills for use in career planning.	Acquiring skills for seeking and gaining employment.
Clarifying their self-concepts, especially with respect to work.	Learning how to find information about careers.	Acquiring vocation-specific skills.
Learning how skills learned in school are useful in careers.	Identifying careers for further exploration.	
Learning basic skills through use of work concepts and methods.		

for helping students to learn about and prepare for work. The activity that was reported least frequently overall, but also was the most enhanced by the adoption of a formal career education policy, was the explicit coordination of career education experiences across grades. Another activity clearly related to the existence of a local career education policy statement was communication of career education concepts to the public, especially via meetings with community groups, as shown in Figure 3.11. That communi-

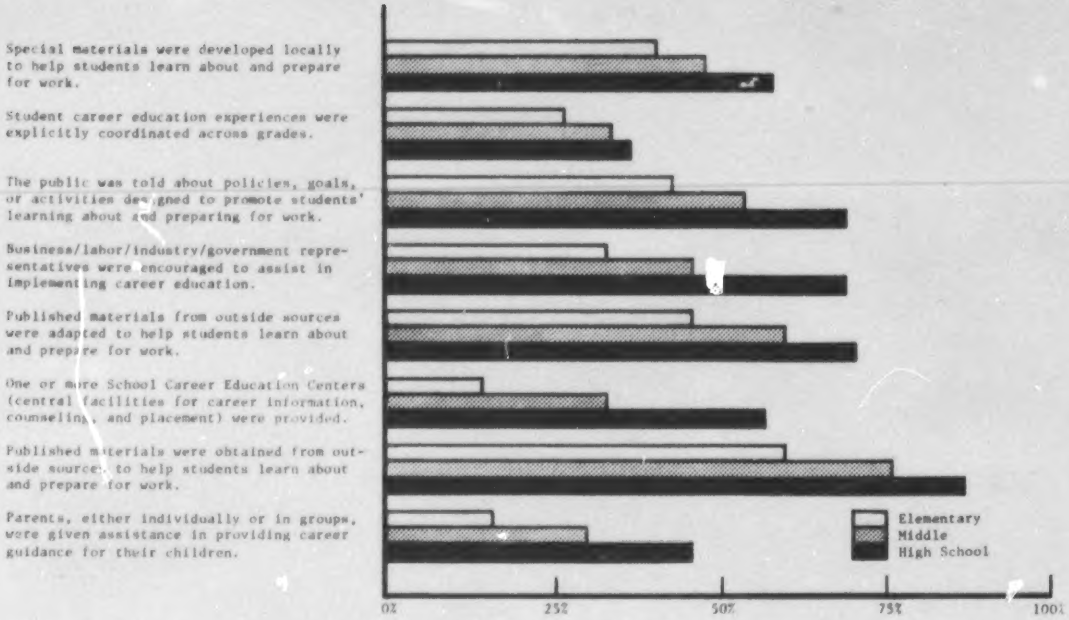

Figure 3.10 Percentages of students in school districts engaging in various career education activities [Q7].

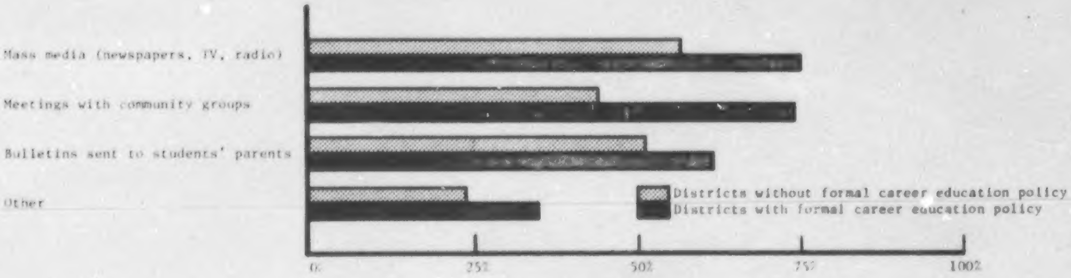

Figure 3.11 Percentages of students in school districts using various methods of publicizing career education [Q8].

cation is a necessary step if community involvement in the schools is to be fostered.

Turning to specific management actions, the results in Figure 3.3 show that the most frequent step taken (in 34% of the nation's school districts) was the assignment of at least some staff specifically to career education, although that included a full-time position in only 18% of the districts. The least frequent step was the establishment of an Advisory Committee for Career Education (21% of the nation's districts), although another 32% reported having an Advisory Committee for Vocational Education that "considers the topic area." The step that was most highly correlated with overall career education activity level was the conduct of "formal evaluations," which took place in a quarter of the school districts in the nation. This rather large percentage of evaluations must be interpreted in light of the methods of evaluation reported, shown in Figure 3.12. For example, only 8% of the nation's districts used standardized tests of career development in these evaluations and only 3% used students' ratings a year or more after leaving school, suggesting the need for further development of sophisticated techniques that can be used by local career education programs. The frequencies of explanations when not carrying out "formal evaluations" of career education are shown in Figure 3.13.

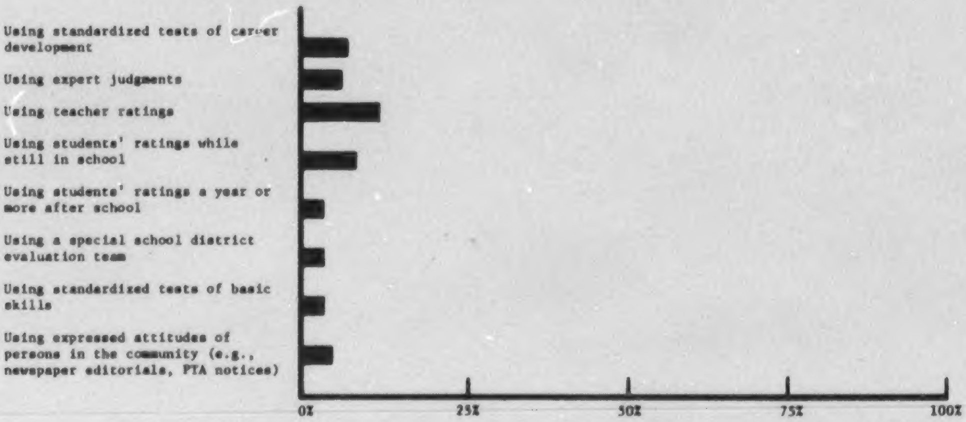

Figure 3.12. Percentages of school districts using various methods of formal evaluation of career education activities [Q26].

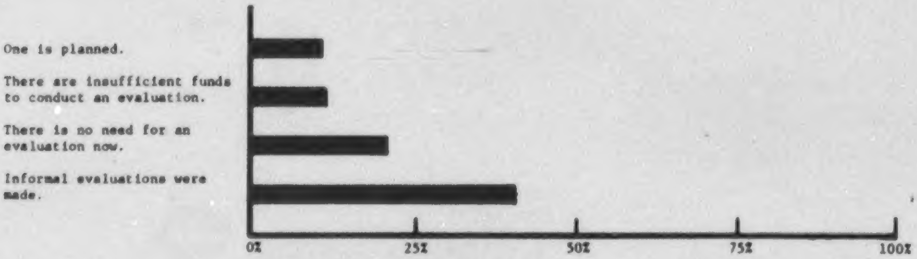

Figure 3.13. Percentages of school districts giving various explanations for not conducting formal evaluations of career education [Q26].

The most significant aspect of the results in terms of the structure of career education policy implementation was the lack of pattern. There was no rigid relationship that step A precedes step B, although the practical steps of allocating funds and staff to career education significantly preceded the adoption of formal written policies, formal evaluations, and formal Advisory Committees for Career Education. The percentages of the responding districts in which only one of the five steps had been taken are shown in Figure 3.14. Clearly, there were diverse beginnings in the development of programs, a characteristic of decentralized movements like career education.

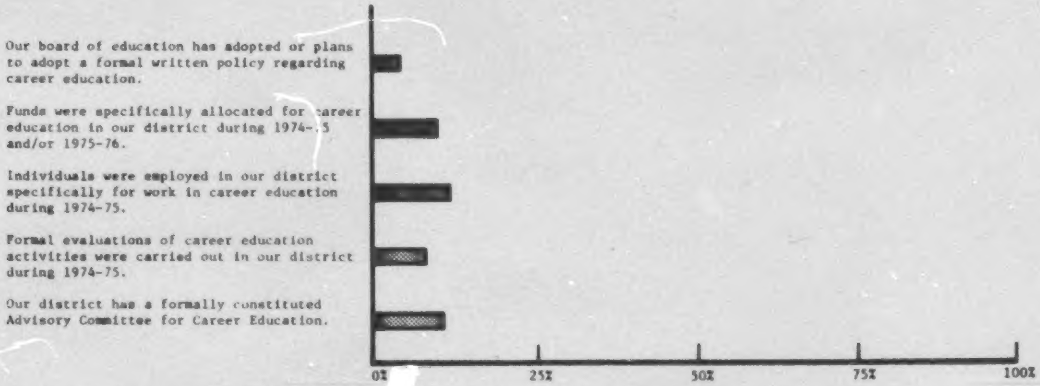

Figure 3.14. Percentage of school districts in which exactly one and not others of the five assessed career education policy steps had been taken, of those that had taken any steps. [23-27]

The survey also assessed the frequencies of eight general educational practices championed by the leaders of the career education movement (USOE, 1975), and these frequencies were shown in Figure 3.7.* The practices that were both most frequent and most highly correlated with career education activity levels were those explicitly involving the adults in the community: using community representatives of the work world as instructional resources, involving the community in education policymaking, and providing adult and continuing education. This suggests that the career education movement was building on existing practices designed to bring the schools and communities together and was supporting their increased implementation.

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*The questionnaire assessed these practices for both the 1974-75 and 1975-76 years. However, because of an apparent misunderstanding of the instructions, the 1975-76 percentages can only indirectly be interpreted.

The integration of career education activities into various instructional components is shown in Figure 3.15. The type of relationship that was most closely correlated with overall career education activity was integration into other subjects at the elementary level. The various techniques and methods in use for career education are shown in Figure 3.16; the most frequent were generally traditional activities. The activities listed as effective most frequently on a free response question were those shown in Figure 3.17. Generally, the career education activities most frequently listed as effective were activities that directly brought students closer to individuals and experiences in the work world.

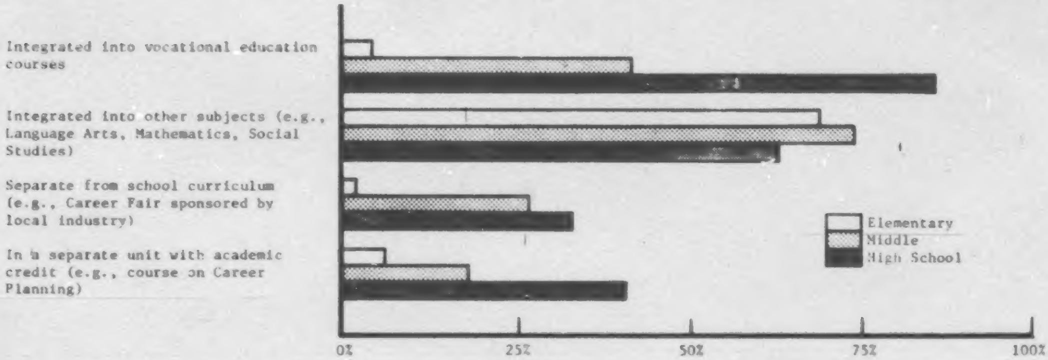

Figure 3.15. Percentages of students in school districts integrating career education activities into school curricula in various ways [Q3].

Three other areas of activity are treated in subsequent sections: staff development activities (Section 3.5), special target group activities (Section 3.7), and materials development activities (Chapter 6). Concerning the activities discussed in this section, several tentative answers to the topical question are suggested.

1. Overall, there were more activities reported at the secondary than the elementary level, but in districts with formal career education activities the effect was to increase the activity level more frequently in the elementary grades. Thus, there is evidence for movement in the direction of the career education goal of involving students of all ages.
2. Career education activities aimed at improving the quality of experiences in the schools were more prominent in elementary career ed-

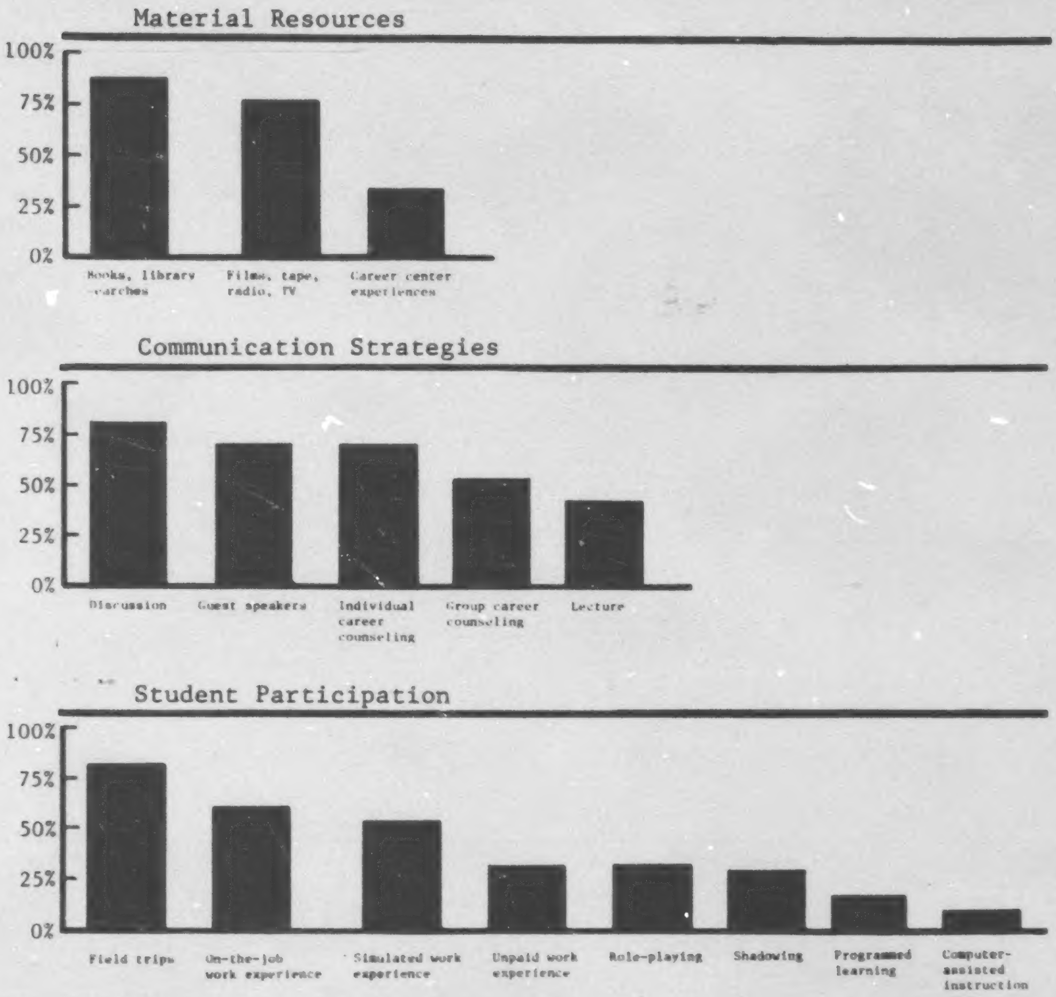

Figure 3.16. Percentages of school districts using various instructional techniques for career education. [Q1]

ucation programs than secondary programs. Among the activities to educate students in the subject matter of careers, activities at the elementary level were primarily imparting information, while at the secondary level they also included imparting skills. There was evidence for a progression from career awareness to career exploration to career preparation activities across the grade levels.

3. There was little sequential order in the steps toward career education policy implementation, indicative of a movement with diverse origins. There was a tendency, however, for practical facets (funds

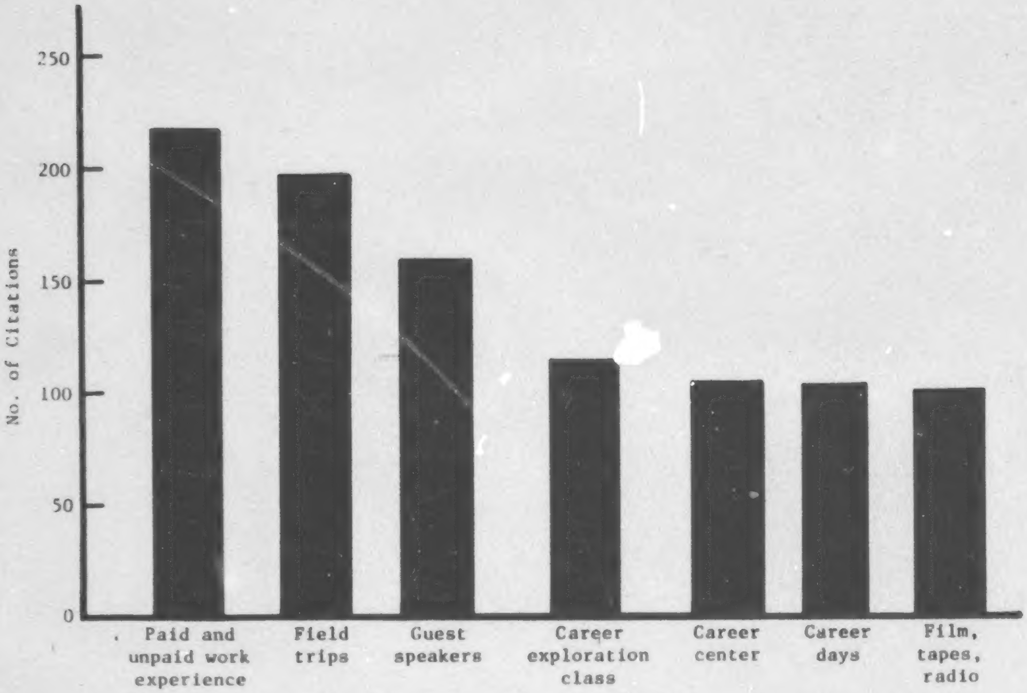

Figure 3.17. Activities most frequently cited as effective in helping students learn about and prepare for work. [Q2]

and staff) to precede formal facets (written policy, evaluation, advisory committees).

4. Of eight general educational practices, the relative frequencies and relations to career education implementation indicate that career education was building on and supporting practices of increasing the adult community involvement in schools.

3.5 How important were the roles played by individuals in the implementation of career education?

The USOE (1975) policy paper on career education includes guidelines for the roles of teachers, counselors, school administrators, and members of the community in the development of career education. The results of the survey indicate what activities were actually being carried out by various individuals and how important these were to achievement of high levels of career education activity within the local districts. The results fall into five categories: (1) the importance of having a career education staff and a local coordinator of career education, (2) the frequency and importance of staff development activities in career education, (3) which individuals conduct activities directly involving students, (4) which individuals conduct support activities, and (5) the frequency and importance of involvement of parents and the business, labor, and industrial community.

Of the 16,000 school districts in the nation, a third had a career education staff, but only 18% had a full-time staff of one or more persons. The sizes of staffs (counting part-time as one half) are shown in Figure 3.18 for districts with and without formal career education policy statements. The level of activity was not significantly related to the size of the staff, however, the correlation between having a staff for career education or not having a staff and the level of career education activity was .40.

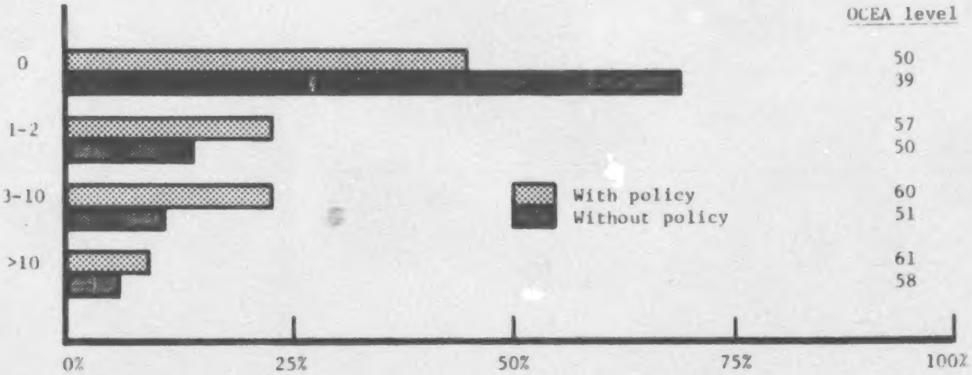

Figure 3.18. Frequency of career education staff sizes and associated levels for districts with and without formal career education policies. [Q25]

The comprehensive implementation of career education affects the activities of the whole of a district's school staff. Forty-four percent of the respondents reported that the endorsement of staff contributed greatly to the success of their programs in career education; however, 64% also stated that staff resistance was at least somewhat of a problem for implementing career education. In districts with a formal career education policy, staff resistance was just as frequently reported (67%), possibly indicating a need for greater sensitivity to the needs of all school staff members in implementing career education.

The background and training of the person in charge of career education was related to the overall level of activity in the school district. The average career education activity scores indicate that career education activity was greatest in the cases in which the coordinator's training included experience in the work world outside of the schools. The data in Table 3.7 also indicate indirectly that individuals other than counselors helped coordinate career education more frequently in districts serving large numbers of students. The relationship of the career education staff to other parts of the school staff are shown in Figures 3.19 and 3.20. Clearly career education and traditional counseling and vocational education are quite closely related in terms of staff background.

Table 3.7

Percentages of Career Education Coordinators from Various Backgrounds as a Function of the Number of Students Served and the Number of Districts [25]

	Counselors	Administrators	Voc. Ed. Teachers	Non-Voc. Ed. Teachers	Business/ Labor/ Industry
Percentage of districts	60%	37%	30%	8%	4%
Percentage of students served	41%	48%	35%	17%	11%

Note. The percentages add to more than 100% because of multiple responses by some respondents.

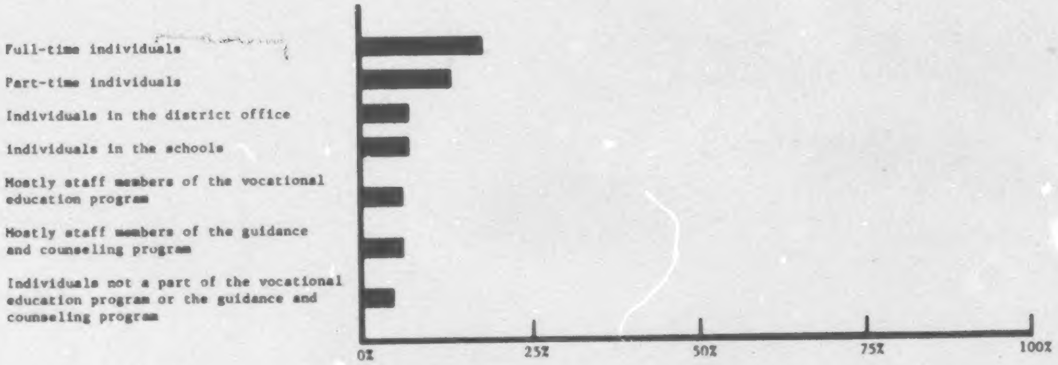

Figure 3.19. Percentages of school districts employing individuals of various characteristics specifically for work in career education. [Q25]

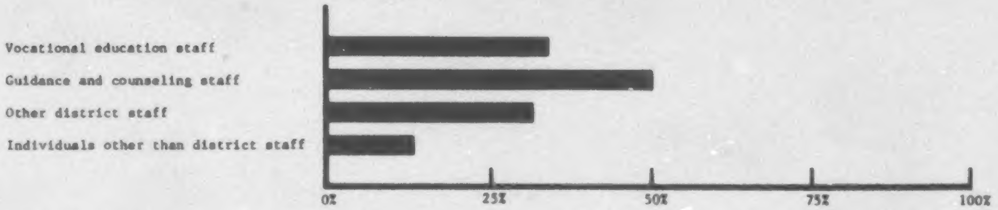

Figure 3.20. Of school districts without individuals employed for work specifically in career education, percentages of other staff providing experiences through which students learn about and prepare for work [Q25].

The involvement of staff in development activities was the most frequent step being taken to implement career education during 1975. Fifty-seven percent of the nation's districts, serving 69% of the nation's students, were carrying on career education staff development activities in one or more of the five topic areas shown in Table 3.4. Overall, the frequencies of the five topic areas were about equal, and very few districts covered some of the topics without covering all. The most frequent method for conveying concepts was attendance at professional meetings; for conveying teaching methods, presentations by local staff experts; for conveying curriculum materials information, published staff development materials; for conveying evaluation techniques, locally prepared staff development materials; and for development of community resources, visits to sites in the work world of the community and locally prepared staff development materials.

Correlations between staff development activities and direct learner activities were significantly positive; the correlations were highest, on the one hand, for staff development activities involving presentations by local staff experts, and on the other hand, for direct learner activities involving students in lower grades.

Who were involved in these staff development activities? The respondents were asked to estimate the percentage of teachers, counselors, administrators, and others who participated, and the average percentages are shown in Table 3.5 for districts with and without formal career education policies. Table 3.5 shows that at the elementary level nationwide, there was not much difference in the percentages of teachers, guidance staff, and administrators involved: about 20% of each type were involved. At the higher grades there was a marked increase, however, in the level of participation by guidance staff. This is undoubtedly due to the fact that many more guidance staff were available for the higher grade levels. Because involvement required both that the district provide a basis for involvement and that particular teachers choose to participate, and because the goal of career education is to involve all staff members, not merely a cadre of specialists, it is also important to know the percentage of each staff category involved in districts in which there was at least some involvement. Table 3.8 shows the average percentage of staff participating for the districts responding that there was at least some involvement of staff in those positions. Table 3.8 indicates that in those districts with some involvement of teachers, about a third of the teachers were involved; for guidance staff and for school administrators the figure was two-thirds. Possibly because there were many more teachers than members of the other categories in each district, it was more difficult to involve a large percentage of them. However, teachers may be the most critical staff members to expose to career education; as one respondent put it, "When teachers grow in their understanding and competence in relating basic skills to earning a living, then

Table 3.8

Correlations of Staff Involvement in Staff Development Activities with Overall Level of Career Education Activity, and in Districts Where Staff Were Involved, the Percentage of the Total Staff That Participated [Q18]

Classification of school personnel	Correlation with career education activity	Percentage participation
Elementary teachers	.44	36%
Middle school teachers	.42	34%
High school teachers	.41	32%
Elementary guidance	.36	69%
Middle school guidance	.51	71%
High school guidance	.50	68%
Elementary administrators	.46	60%
Middle school administrators	.45	67%
High school administrators	.46	66%
Paraprofessionals	.32	53%
Librarians	.39	59%
Health workers	.22	56%
Social workers	.21	51%

we will see a real change of direction." Among the categories other than teachers, guidance staff, and administrators, librarians were the most frequently involved; they can play an important role in career education by providing sources of information about careers and the world of work to support student career exploration.

In most categories, the percentage of participation was highly related to overall career education activity level, as seen in Table 3.8. When only school districts with formal written policies for career education were considered, the overall average levels of involvement were approximately 10% higher; however, the percentage of participation in districts with some involvement of a category showed little effect from formal policies: the largest increase was 4%, for elementary school teachers. That is, a formal policy statement was conducive to setting up staff development activities rather than to achieving universal participation in them.

The staff development activities took place primarily before, during, or after school hours, but activities were also frequently reported on "institute days" and during vacations (Figure 3.21). The compensation for these activities was most frequently as released time from regular assignments, but additional money and college credit were also frequently reported (Figure 3.22). Although activities at any time and for any type of compensation were significantly correlated with overall career education activity (correlations primarily between .4 and .5), there was no indication that one time or one type of compensation might be particularly related to overall career education activity level.

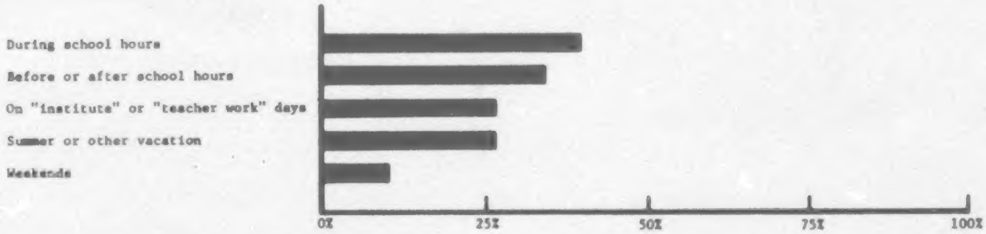

Figure 3.21. Percentages of students in school districts utilizing various time periods to conduct career education staff development activities [Q21].

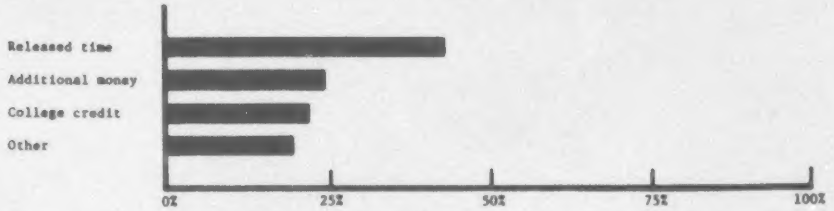

Figure 3.22. Percentages of students in districts using compensation staff development efforts [Q19].

Turning now to the direct student participation career education activities, the overall role of teachers was greatest, followed by counselors, school administrators, and with some involvement of the work community in each activity (see Table 3.9). In terms of their relative involvement in particular activities, the global generalization is that teachers, administrators, and work world members conducted similar activities when they were involved, but counselors conducted quite different activities. However, teachers, unlike administrators and work world members, were involved in teaching vocational skills and in using work resources to teach basic skills; and administrators were more similar to counselors than to others in their level of involvement in testing to increase students' self-knowledge and helping students develop their self-concepts, including their work values. In general, the teachers, administrators, and work world members were more frequently associated with activities that occurred at all grade levels, but counselors were associated primarily with activities occurring at the secondary level.

When only students in districts having formal career education policies were considered, the frequency of involvement of teachers in direct-learner career education activities was 9% higher and of work world members was 8% higher; however, the increase in involvement of others was not great: 5% for counselors and 5% for administrators. All involvement was significantly related to overall career education activity level (correlations ranged from .21 to .48); the activity for teachers most indicative of a high level of career education activity was helping students to develop their self-concepts, including work values; for counselors, showing how to use work experiences to evaluate careers; and for administrators and work world members, teaching facts, terms, and concepts about careers and occupations. In each case,

Table 3.9

Percentage of Students Nationwide in School Districts That Involve Various Categories of Personnel in Career Education Activities

Direct Student-Learning Activities	Teachers	Counselors	Administrators	Business Community
Students were taught facts, terms, and concepts about various careers or occupations.	83	68	22	43
Students were shown how work relates to the individual and to society in general.	80	59	18	34
Students' abilities were formally assessed to increase their self-knowledge and to help them in thinking about or planning careers.	52	68	13	8
Students were told about attitudes, habits, and values related to various careers or occupations.	75	67	15	27
Students were assisted in clarifying and/or developing their own self-concepts, including interests, attitudes, and values with respect to work.	70	69	13	13
Students were shown how to consider particular careers or occupations in terms of their own individual values, interests, and abilities.	65	69	10	14
Students were taught decision-making skills to help them consider career plans or occupational choices.	64	56	10	8
Students were shown how to find information about careers or occupations.	70	77	11	10
Students were shown how to use work experiences to evaluate occupations.	60	51	9	17
Students were helped to identify one or more careers for further exploration.	68	69	10	12
Students were shown how skills learned in school are useful for work in various careers or occupations.	77	56	13	22
Students were told of the rewards (e.g., money, satisfaction) offered by various careers or occupations.	73	63	12	27
Students were taught skills for seeking and gaining employment.	78	52	12	19
Students were taught vocation-specific skills.	78	24	8	17
Work methods, materials, and concepts were used in teaching basic skills, such as reading and arithmetic.	69	20	8	7
Support Activities				
The public was told about policies, goals, or activities designed to promote students' learning about and preparing for work.	54	55	63	22
Published materials were obtained from outside sources to help students learn about and prepare for work.	79	79	53	27
Published materials from outside sources were adapted to help students learn about and prepare for work.	69	59	37	14
Special materials were developed locally to help students learn about and prepare for work.	62	44	32	14
Student career education experiences were explicitly coordinated across grades.	38	31	30	9
One or more School Career Education Centers (central facilities for career information, counseling, and placement) were provided.	29	52	26	6
Business/labor/industry/government representatives were encouraged to assist in implementing career education.	51	49	47	36
Parents, either individually or in groups, were given assistance in providing career guidance for their children.	27	45	23	5

these were among the activities most affected by the existence of a formal career education policy statement in the district.

Results from previous surveys conflict with one significant result of this survey: In responding to this questionnaire, the local school districts indicated more activities to help students learn about and prepare for work at the secondary than at the elementary level, whereas other, less extensive surveys have arrived at the conclusion that greater activity has occurred at the elementary level. The most compelling explanation of this conflict is that while other surveys focused on districts in which innovative career education projects were being developed, this survey assessed the frequency of particular school activities nationwide, independently of whether the district was attempting to develop an innovative career education project. Because most high schools were carrying on some activities to prepare many of their students for the world of work prior to the current career education movement, these activities outnumbered the innovative extensions of career education to all students at all grade levels.

In order to test this hypothesis, the frequencies of the 15 direct student learner activities listed in Table 3.6 and Figure 3.8 were reanalyzed, considering only activities in which teachers and not counselors were involved (because the involvement of teachers was considered more central to innovative projects) and only activities reaching "nearly all" as opposed to "few" or "many" students. The results, shown in Table 3.10, support the explanation: for this restricted analysis of districts, which approximates the results that might have been obtained by other surveys, involvement of elementary grades was at least as great as involvement of the secondary grades. However, the middle grades stood out as having the greatest overall level of activities in this subsample of districts. That result is supported by earlier survey results (e.g., PSE, 1974, p. 45).

Turning now to career education support activities, generally administrators were more involved here than they were in direct learner activities, but they still were less involved than teachers and counselors. Teachers and counselors were most involved in obtaining, adapting, and developing instructional materials; administrators were most involved with communication to the public; counselors were involved in Career Centers;

Table 3.10

Percentages of Activities in Districts Where Nearly All Students Participated in Career Education Activities Conducted by Teachers, Without Counselor Participation

	Grade Level		
Types of Activities	Elementary	Middle	Secondary
Activities to motivate schoolwork:			
Work methods, materials, and concepts were used in teaching basic skills, such as reading and arithmetic.	13	12	11
Students were shown how skills learned in school are useful for work in various careers or occupations.	11	17	11
Activities to provide career-relevant information:			
Students were taught facts, terms, and concepts about various careers or occupations.	10	13	8
Students were shown how work relates to the individual and to society in general.	18	18	9
Students' abilities were formally assessed to increase their self-knowledge and to help them in thinking about or planning careers.	7	24	10
Students were told about attitudes, habits, and values related to various careers or occupations.	11	18	10
Students were assisted in clarifying and/or developing their own self-concepts, including interests, attitudes, and values with respect to work.	13	17	10
Students were told of the rewards (e.g., money, satisfaction) offered by various careers or occupations.	9	15	8
Activities to provide career-relevant skills:			
Decision-making			
Students were shown how to consider particular careers or occupations in terms of their own individual values, interests, and abilities.	8	16	8
Students were taught decision-making skills to help them consider career plans or occupational choices.	8	12	5
Students were shown how to find information about careers or occupations.	10	21	14
Students were shown how to use work experiences to evalaute occupations.	1	6	3
Students were helped to identify one or more careers for further exploration.	6	17	13
Preparation			
Students were taught skills for weeking and gaining employment.	4	6	9
Students were taught vocation-specific skills.	0	2	4

and work world members were involved in bringing the business, labor, and industrial community in as an instructional resource. The involvement of parents was not great, and nobody was greatly involved in coordinating career education experiences across grades.

In districts with formal career education policy statements, the overall involvement of administrators was 11% greater and of teachers, 10% greater; of counselors, 8% greater; of parents, 6% greater; and of work world members, 6% greater. The involvement was greater particularly in the coordination of career education experiences across grades, averaging a 15% increase across teachers, counselors, and administrators. That support activity, along with local deve-opment of materials and encouraging work world participation in career education, both of which were 10% more frequent in districts with formal career education policies, was most indicative of a high level of career education activity in the district.

Finally, we turn to the role of the community. In the real meaning of career education as a reform, the reduction of barriers between the schools and the surrounding communities is central. The role of the work community and of parents was assessed in ten different question in the survey, and many of the results discussed here are covered elsewhere in this chapter.

Concerning involvement in instruction, 85% of students were in districts that used work world representatives as instructional resources (see Figure 3.17), and that was the general educational practice, of the eight suggested in the USOE plicy paper on career education, most correlated with overall career education activity (r = .33). The involvement of work world members in career education instructional and support activities, discussed in the preceding paragraphs, was certainly occurring and was correlated with overall career education activity level (see Table 3.10). They were contributing to career education staff development activities, both by making presentations to school staff and by providing for visits of school staff to their work sites (see Table 3.4).

There was also general and policymaking involvement of the community. Again, the involvement of the community in educational policymaking was highly correlated with the overall career education activity level (r = .32).

Work world members were present on over half of the formal Advisory Committees for Career Education (see Figure 3.23), and their participation was more related to level of career education activity in the district than any other member category (r = .38). The participation of parents on these committees was also important, and contributions to career education were made by various civic and service groups, most notably the Scouts.

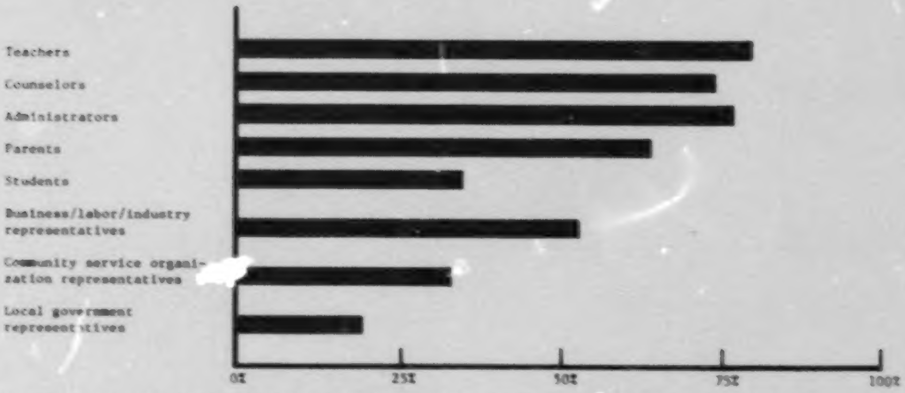

Figure 3.23. Of school districts with a formally constituted Advisory Committee for career education, the percentages with various types of participants on the committee [Q27].

Various factors in the success of career education and various sources of problems were assessed in the survey. These are discussed in detail in Section 3.8. While contributions of parents and of work world members were frequently cited as success factors, lack of contributions was rarely cited as a source of difficulty; however, lack of interest in the business, labor, and industrial community was one of the most potent problem sources when it occurred, being correlated -.31 with overall level of career education activity.

In general, community involvement was associated with a greater amount of career education activity, and involvement was greater where there was a formal career education policy statement. A further type of work world participation, which has recently been highlighted in theoretical considerations of career education (e.g., Grubb and Lazerson, 1976), is the redesign of work roles to reduce worker alienation and to assure that young people who have been prepared to seek fulfilling work will not be faced with a reality of labor without fulfillment or satisfaction when they enter the job market. Assessment of this kind of participation was beyond the scope of this survey; however, as the schools and the world of work interact in greater frequency and depth, we might hope that this aspect of participation would develop.

To summarize the results of this section:

1. The involvement of teachers and of members of the world of work was particularly related to high levels of career education activity, in contrast with counselors and administrators.
2. Counselors were conducting many activities to help secondary students learn about and prepare for careers, although these activities were not dependent on implementation of career education programs.
3. Having a full-time career education staff was related to level of career education activity, although from these data it could not be shown to be a crucial factor.
4. Although many local career education coordinators were counselors, the level of activity was greatest in districts in which coordinators had "nontraditional" training for this function.
5. The level of staff development activity was highly related to the amount of direct instructional activity in career education.
6. The roles of different categories of individuals were not completely interchangeable: Each category tended to emphasize certain activities.
7. The existence of a formal career education policy statement was related to greater staff and community involvement, but it did not tend to have the effect of leading to universal participation of the district's staff in career education staff development activities.
8. And, by reanalyzing the instructional activities in career education, the conflict between the findings of this survey and earlier surveys concerning the relative level of activities on the elementary and secondary levels was tentatively explained: Earlier surveys were focused on innovative projects, whereas this survey was

representative of all districts. Activities to help some high school students learn about and prepare for work have been carried out in most districts whether they have innovative career education programs or not.

3.6 Was career education provided equally to all groups of young people?

There are several reasons why school districts in some segments of our society might not be developing career education programs as rapidly as others: (1) career education's objectives might not be widely accepted in those segments of society, (2) opportunities for career education support port may not have been provided to those segments of society, (3) those segments of society may be unable to take advantage of opportunities for career education support through lack of mechanisms, or (4) there may be special inhibiting factors tending to slow development of career education in those segments of society. In this survey, school districts were chosen from four geographic regions of the country and from three types of communities, and included districts with small, medium, and large enrollments; districts with low, medium, and high median incomes; and districts with whites in the majority and with other ethnic groups in the majority. In this section, the overall levels of career education activity and of career education policy acceptance are compared across these different segments of American society.

School district size. The sample was chosen to represent large, medium, and small school districts. As can be seen in Figure 3.24, there was significantly more overall career education implementation in the larger districts than in the smaller districts. The differences related to school district size are broad in scope, covering the range of activities and policies assessed in the survey. The small districts differed from large districts not only in activity levels, but also in their perceptions of the importance of various career education outcomes and in the success factors and difficulties they reported. Of the nine learner outcomes, the four that small districts rated much lower than large districts were the four that were most related to overall career education activity and to having a formal career education policy statement. These four outcomes were providing students (1) with career decision-making and adapta-

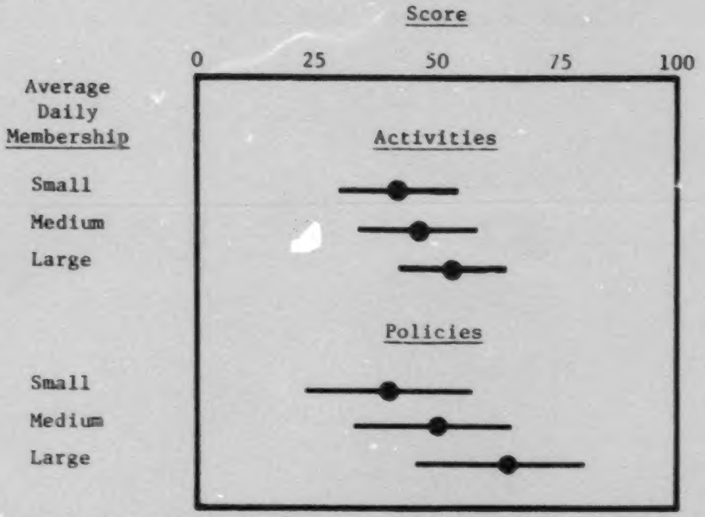

Figure 3.24. Overall means and standard deviations of career education implementation, in small (ADM <5,000), medium, and large (ADM >20,000) school districts.

bility skills, (2) with career decisions based on the widest possible data, (3) with successful placement after leaving school, and (4) with work values incorporated into their personal value structures. The small districts also had characteristic difficulties: significantly less interest and endorsement by the business, labor, and industrial community; lack of funds to purchase materials and of competent persons to train their staff. Large school districts also mentioned endorsement of parents and Federal assistance as contributing to the success of career education more frequently than did small districts. The larger districts, with larger and more flexible staffs, were in a better position to participate actively in the career education movement than were the smaller districts. The leadership of the Federal and State governments may therefore need to focus on the small school districts in order to achieve universal and equal career education implementation. Moreover, the source of the differences in rating important career education learner outcomes should be investigated to determine how the career education movement can best contribute to the needs of smaller districts. Of the four reasons for lagging implementation listed at the beginning of this section, there is some evidence that all were impeding the progress of career education in small school districts.

Community. The districts in the sample were divided into three groups, those in central cities of metropolitan areas, those in suburbs of metropolitan areas, and those outside any metropolitan area. By the nature of school district creation, this dimension is highly correlated with school district size, as shown in Table 3.11. Results relating to these two dimensions are therefore confounded: Effects may be due either to the size of the school district or to its type of community.

Table 3.11

Distribution of School Districts as a Function of Type of Community and School District Size

	Size			
Type of Community	≤5,000	5,001-20,000	>20,000	Total
Central city	10	94	117	221
Suburb	131	180	75	386
Outside metropolitan area	175	77	1	253
Total	316	351	193	860

Globally, the results are less closely related to community than to school district size, as can be seen in Table 3.12. Although we have interpreted them, in the preceding paragraph, as related to school district size, this interaction may help to understand why small school districts were implementing career education less extensively. According to Table 3.12, the effect of school district size occurred for each type of community; however, the differences in overall career education implementation *between* types of communities occurred primarily among small school districts. That is, a small district in a central city was likely to have a more extensive career education program than a small district outside a metropolitan area, but the same was not true of larger districts. Two possible reasons for this are (1) that a small school district in a central city may have had adjacent school districts with which it could pool its efforts to promote career education, and (2) that the sources of support for career education activities (e.g., libraries, businesses, technological innovations) were easier for a small career education staff to access in the central urban setting. In any case, the differences between the types of community were less significant than the differences between large and small school districts.

Table 3.12

Overall Levels of Career Education as a Function of Average Daily Membership and Type of Community

	MEAN ACTIVITIES SCORES				MEAN POLICIES SCORES			
	Average Daily Membership				Average Daily Membership			
Type of Community	≤5,000	5,001-20,000	>20,000	Mean	≤5,000	5,001-20,000	>20,000	Mean
Central city	47	50	55	53	50	55	66	60
Suburb	40	46	56	46	38	50	67	50
Outside metropolitan area	42	47	63	44	42	50	70	44
Mean	41	47	56	47	40	51	66	51

Region. The discricts in the sample were divided into four regions: the Northeast, the Northcentral, the Southeast, and the West. Because the size of school districts and frequency of metropolitan areas differ across the regions of the country, and because the sample reflected this difference in order to be representative, we must compare career education implementation across regions in the context of other factors. The levels of overall implementation in each region are given in Table 3.13, correcting for district size and type of community (uncorrected figures are in parentheses). While uncorrected figures show a slightly greater implementation in the Southeast and less in the Northcentral, the corrected figures show this to be a very small, statistically insignificant difference.

By 1974-75 career education had penetrated to all geographic regions of the country equally. This may in part be due to the significant efforts of the U.S. Office of Career Education to encourage active participation at numerous widely spaced sites, for example through the series of 20 mini-conferences held in 1974 in which local school staff from around the country met to discuss career education.

Table 3.13

Corrected (Uncorrected) Levels of Overall Career Education Implementation, by Region of the Country

Region	Mean Activities Scores	Mean Policies Scores
Northeast	47 (46)	52 (50)
Northcentral	46 (45)	50 (48)
Southeast	48 (50)	52 (54)
West	46 (47)	51 (52)

Median income level. The responding districts were divided approximately into thirds based on median income level as reported by respondents and derived from published census figures; there remained 113 cases with missing data. Because of the questionable reliability of these data, especially in a time of rapid inflation when date-of-reporting becomes critical, these results should be viewed as tentative.

Basically, there was almost no difference in overall career education implementation between "affluent" and "economically disadvantaged" districts, as can be seen in Table 3.14.

Table 3.14

Corrected (Uncorrected) Levels of Overall Career Education Implementation, by Median Income Level

Median Income Levels	Mean Activities Score	Mean Policies Score
<$9,333	47 (47)	50 (50)
$9,334-$11,900	49 (50)	52 (54)
>$11,900	47 (47)	51 (51)

A correction for type of community was necessary because of the significant correlation between community and median income in the sample, as seen in Table 3.15.

Table 3.15

Number of Respondents, by Type of Community
and Median Income Levels

	Median Income Level		
Type of Community	<$9,333	$9,334-$11,900	>$11,900
Central city	67	94	52
Suburb	58	81	170
Outside metropolitan area	105	63	47

Among particular activities, the school districts with low median income levels were notably more concerned with removing race and sex stereotypes from curriculum materials, possibly indicating a greater sensitivity to these problems in that sector of society.

One is tempted to conclude that there was equality across income levels in the implementation of career education. We cannot rule out another alternative, however: The apparent equality may have been the result of offsetting forces--affluent school districts tend to incorporate innovative techniques sooner than economically disadvantaged districts, but the career education concept may be a particular innovation that is not as appealing to affluent parents who may desire a more academic curriculum for their children. However, such fears, if they exist, were not supported by the following result of this survey: The percentage of students going on to college was positively correlated with the overall level of career education activities (r = .16).

There were some indications in the survey responses that the above explanation should not be ruled out. The less affluent districts tended to rate the learner outcomes of career education as being slightly more important on the average than did the more affluent districts; the greatest difference was in the area of providing sufficient vocational skills. The less affluent districts also slightly more frequently mentioned lack of funds as a difficulty and less frequently attributed difficulty to staff resistance, and the less affluent districts more frequently mentioned State and Federal assistance as contributing to the success of their career education programs. These differences, though statistically significant, were not sufficiently large to cast doubt on the conclusion that career education was generally being implemented with equal effort in affluent and economically disadvantaged school districts.

Ethnic minority population. Of 820 responding school districts that provided data on the percentages of several ethnic groups within their school district, 702 were more than 50% white. Because there is continuing concern that equal opportunities be provided for all ethnic groups, it is important to determine whether ethnic minorities were receiving too little, or too much, emphasis on career education in relation to whites. The results are shown in Table 3.16, corrected for school district size and community type.*

Table 3.16

Corrected (Uncorrected) Levels of Overall Career Education Implementation, by Ethnic Group Majorities in School District Populations

Ethnic Group	Mean Activities Scores	Mean Policies Scores
White	48 (46)	51 (50)
Nonwhite	48 (50)	52 (56)

---

*The correction for the fact that minorities tended to be in large central city school districts was appropriate, because an examination of the ethnic effects within each demographic category revealed no residual effect, while reversing the procedure, partialing out the ethnic effect prior to examining the effect of school district size did not reduce the school district size effect.

Clearly, there was very little ethnic inequality in overall implementation of career education. However, within these categories some differences were noted. Nearly all instructional techniques were more frequently reported in use for career education in minority districts; there was more frequently a separate career education curriculum unit in these districts, and adult education programs were more frequent in them. More activities were noted at the elementary grades in particular in minority districts, and special efforts were made to help minorities more frequently in these districts. The minority districts tended less frequently to have formal policy statements and advisory committees for career education, although they tended to rate the student outcomes of career education as more important than did the districts with a majority of white students.

To summarize the results of these demographic comparisons, it appears that the career education movement had been implemented fairly equally throughout the various demographic sectors of our society, with a single exception; that exception is that small school districts had not provided as wide a variety of career education activities as had their counterparts with larger enrollments and, presumably, larger staffs.

3.7 What special career education efforts for special target groups have been implemented?

Opportunities for fulfilling careers that build upon individual values, interests, and abilities have been limited for women, for racial and ethnic minorities, for the mentally and physically handicapped, and for the gifted. In response to this, the authors of the 1974 Federal career education legislation specified that these groups be given special attention in career education programs. Sex and race stereotyping of careers in instructional and guidance materials is extensive (see Chapter 6 of this report and the EPIE [1975] evaluations), and sex stereotyping of vocational education courses is nearly universal. In the survey, several questions dealt with these special target groups, and the results are discussed in this section.

Sexes. Along with many other institutions in American society, schools have contributed to the sex-stereotyping of adult career roles. One of the primary goals of the career education movement is equal opportunity for development of any career by members of either sex. In line with this goal, 65% of the nation's students were in districts taking steps to remove sex-stereotyping of careers from curriculum materials (see Figure 3.25); and 24% of the nation's elementary pupils, 32% of the junior high school pupils, and 36% of the secondary school pupils were in districts making special career education efforts at their grade levels aimed at broadening the career opportunities of young women (see Figure 3.26). The relative frequencies of such activities in regular and special classes is shown in Figure 3.27. Vocational education courses in high school are an important component in the conceptual framework of career education. However, there was still a great deal of sex-stereotyping in enrollment in most vocational education courses (see Figure 3.28). On the other hand, it was possibly not as extreme as in the past; many of the districts checked categories indicating 1% to 25% participation of the minority sex, rather than 0%, in these programs. The only areas in which a majority of the responses were in the 26% to 75% (equal-sex) ranges were Distributive Education and Health, and the most sex-stereotyped area was Trade and Industrial Education.

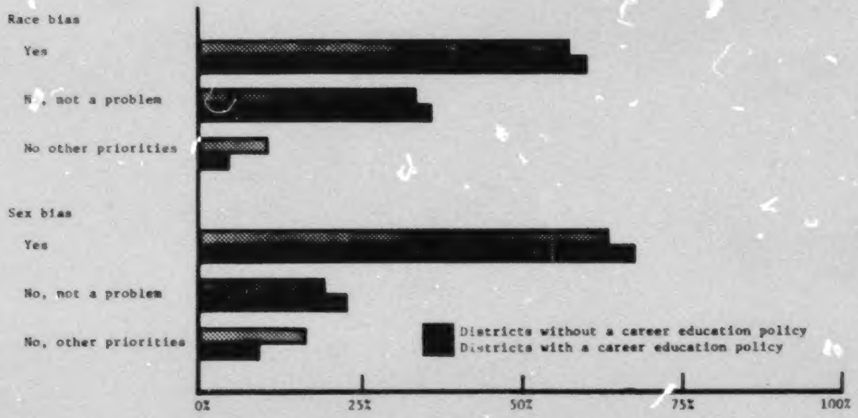

Figure 3.25. Percentage of students in districts that are taking steps to remove race and sex bias from curriculum materials. [Q11 & Q12]

How much of this activity was associated with formal career education program implementation? In order to answer this, Figures 3.25, 3.27, and 3.28 include comparisons between districts with and without career education policy statements. Although more special efforts for women were being made in regular classes in school districts with formal career education

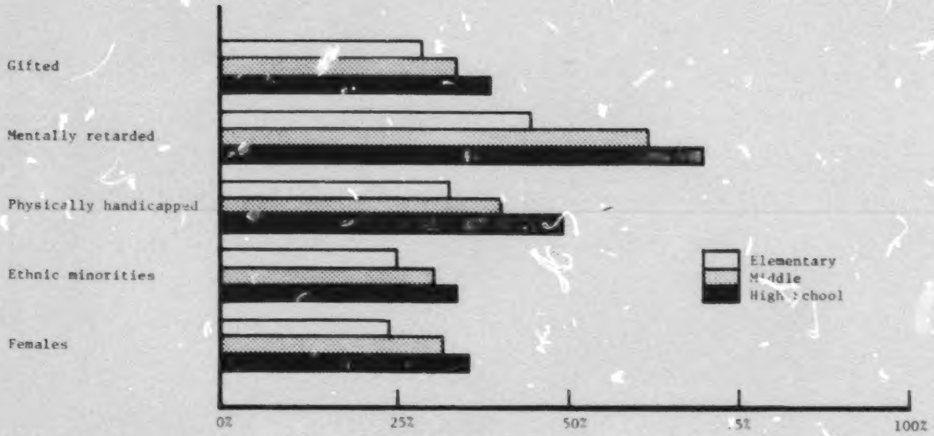

Figure 3.26. Percentages of students in school districts supplying special career education for various target groups [Q14].

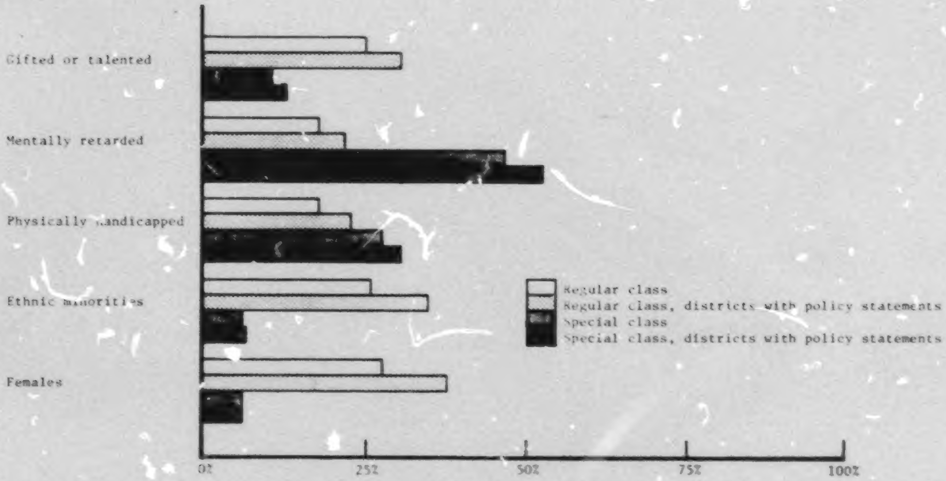

Figure 3.27. Percentages of students in school districts supplying special career education for various target groups, as a function of adoption of a formal career education policy and type of classes [Q14].

policies, there was virtually no increase in removal of sex-stereotyping from curriculum materials and from vocational training courses. These are areas for emphasis in future career education implementation. Until sex-stereotyping of careers is eliminated, the career opportunities of young women and young men will not be equal.

Ethnic minority groups. Fifty-eight percent of the nation's students were in districts that were taking steps to remove racial bias from career education curriculum materials (Figure 3.25). While this represents a very significant effort, it is somewhat disturbing that 34% replied, "No, this

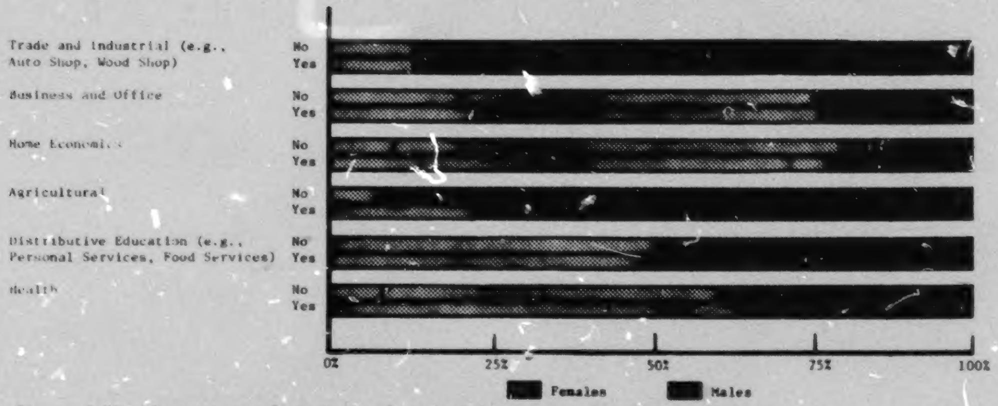

Figure 3.28 Percentage of students of each sex in six types of vocational education course, as a function of adopting a formal career education policy [Q15].

is not a problem." Due to the continuing need to deal with this problem (see Chapter 6), it appears that further efforts are necessary. Even if the 34% included mainly all-white schools, it is important that white youth be exposed to materials that emphasize racial and ethnic equality. Special efforts aimed at the career opportunities of ethnic minority youths were being undertaken in districts serving 25% to 35% of the nation's students, paralleling the efforts for young women (Figure 3.26).

A comparison of the ethnic distributions of school districts with and without formal career education policy statements is given in Figure 3.29. There is a slight tendency for more blacks to reside in districts with formal career education policies. However, the difference is not great. The results of Section 3.6 indicated that the overall level of career education was virtually the same in districts mainly white and mainly nonwhite.

Special career education efforts aimed at broadening the career opportunities of ethnic minorities were most frequent in the regular classes of districts with formal career education policies (Figure 3.27); however, these districts were not more frequently taking steps to remove race bias from career education curriculum materials than other districts (Figure 3.25). There still remains a great deal to be done to achieve racial and ethnic equality in career opportunities through career education.

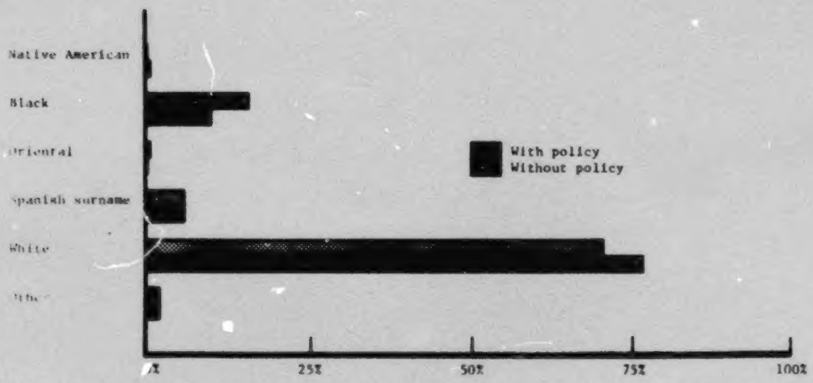

Figure 3.29. Ethnic composition of school districts with and without formal career education policies [Q30].

Handicapped and gifted students. Forty-nine percent of the nation's students were in districts reporting special efforts at the secondary level to broaden the career opportunities of physically handicapped youths; 70% were in school districts where there were special career education efforts for the mentally retarded at the secondary level; and 39% were in school districts where there were special career education efforts for gifted youth at the secondary level (Figure 3.26). These numbers were not related to the existence of a formal district policy statement on career education, however. At the elementary level there were fewer special efforts for these groups, and when they did occur at the elementary level, they tended to occur in districts with formal career education policies. The relationship of career education to college attendance is indicated in Figure 3.30. There was a small positive correlation between overall career education activity level and the percentage of students attending college.

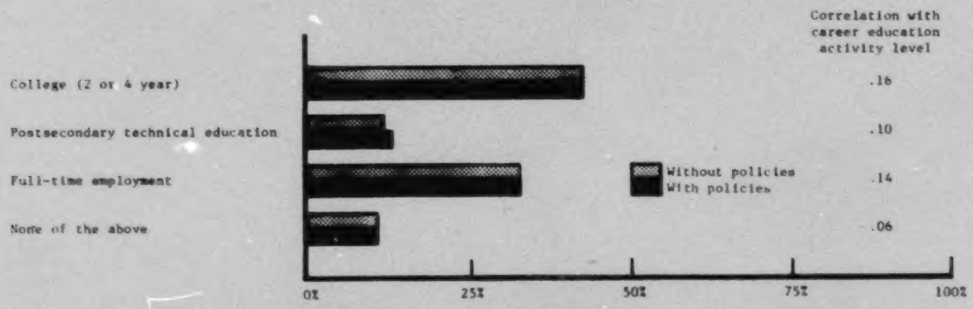

Figure 3.30. Percentages of students who graduated in 1975 and went into various post-high school activities, in districts with and without formal career education policy statements, and correlations with overall career education activity levels [Q17].

For all special target groups, the districts reported most efforts at the high school level and fewest efforts at the elementary level (Figure 3.26), but elementary level activities were more likely to be increased by the establisment of a formal career education policy than high school level activities. At all levels, special career education efforts were more frequently directed toward handicapped youths than ethnic minorities, women, or gifted students. Efforts on behalf of the various special target groups were generally greater in districts with extensive overall career education implementation (correlations of the various dichotomous items with the overall level of career education activities were in the neighborhood of .25, indicating a moderate but significant relationship between these activities and participation in the career education movement). Thus, career education is generally making a contribution to the equalization of career opportunities for all young people in America, but a great deal has yet to be done.

3.8 What factors do local school districts see as critical for the success of career education in practice, and what are the critical problems they have had in implementing career education?

The respondents to the survey were asked to evaluate subjectively the status of career education in their districts, the needs of their programs, the factors contributing to the success of career education in their districts, and the problems they encountered. The data are based primarily on ratings of the districts as shown in Figure 3.31 and Table 3.17. A majority of the respondents acknowledged that vocational educators and guidance coun-

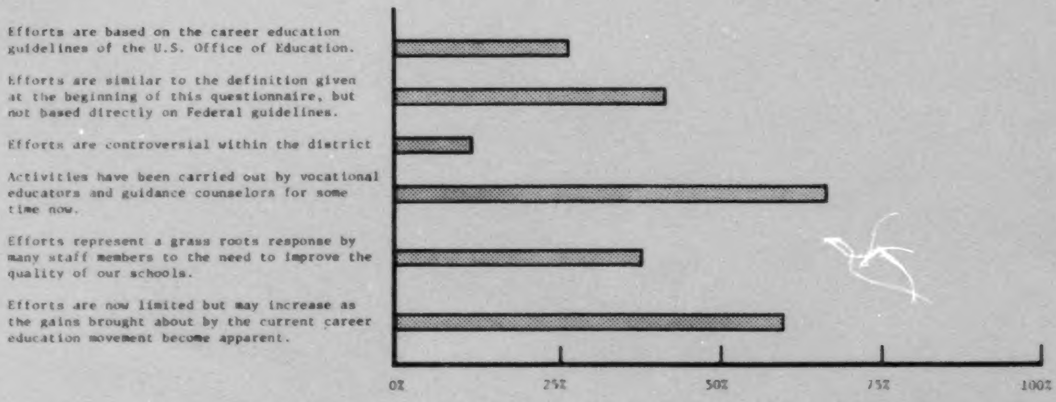

Figure 3.31. Percentages of students in school districts describing their career education efforts in various ways. [Q38]

Table 3.17

Self-Descriptions of Career Education Efforts as a Function of the Proportion of Minority Students, Median Family Income, and Type of Community

	Based on USOE guidelines	Carried out by traditional staff	Controversial	Now limited
Average	27%	67%	12%	60%
High minority districts	36%[a]	63%	5%[a]	65%
Los minority districts	26%	68%	13%	59%
High SES districts	25%	69%	15%	61%
Medium SES districts	34%[a]	65%	15%	54%
Low SES districts	25%	68%	8%[a]	64%
Central cities	40%[a]	66%	11%	56%
Suburbs	26%	65%	13%	63%
Outside metropolitan areas	17%[a]	70%	12%	58%
Correlations with overall career education activity level	.30	.10	.01	-.08

[a] Significantly different from the average ($p < .05$)

Note. Each respondent was instructed to "check all that apply."

selors had been carrying out activities to help students learn about and prepare for careers, although only a quarter described their efforts as based on the career education guidelines of USOE. A higher percentage of use of USOE guidelines occurred in higher minority districts, and in districts basing their programs on USOE guidelines there were more likely to be formal career education policy statements. A majority also acknowledged that their efforts were limited but might "increase as the gains brought about by the current career education movement become apparent." Twelve percent of the respondents believed efforts were controversial in their districts, but this response rate was only half as great in economically disadvantaged districts and in districts with high ethnic minority concentrations. These results indicate a certain tentativeness to the support of the Federal move to institutionalize career education. However, programs based on the USOE guidelines did have a higher level of career education activity ($r = .30$). Indications concerning the adequacy of the dissemination of information about the Federal role in career education are shown in Figure 3.32. Respondents in three-quarters of the sampled districts knew of the Office of Career Education and two-thirds were acquainted with the career education policy paper by Kenneth Hoyt (USOE, 1975).

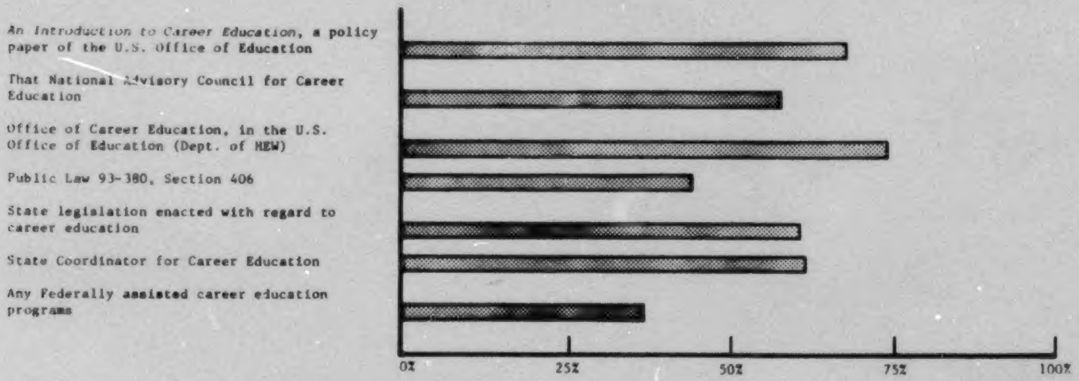

Figure 3.32. Percentages of students served by school districts in which the respondent was acquainted with information related to career education. [Q36]

Success factors and difficulty factors for career education programs can be divided into two categories, those that relate to attitudes and those that relate to substance. In general, as can be seen in Figures 3.33 and 3.34, attitudinal factors were rated more frequently as contributing to success and less frequently as problems than were substantive factors. From the point of view of the local districts, it would appear that their staff, the parents, and the business, labor, and industry community were

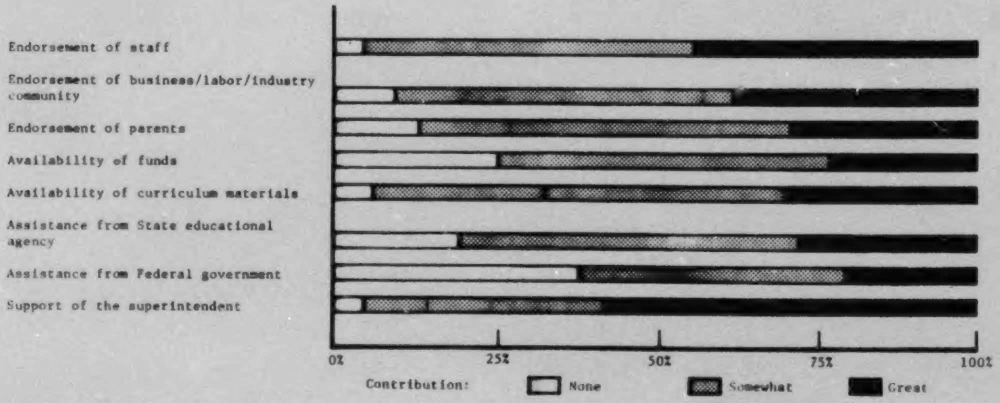

Figure 3.33. Frequencies of ratings of factors contributing to the overall success of career education [Q33].

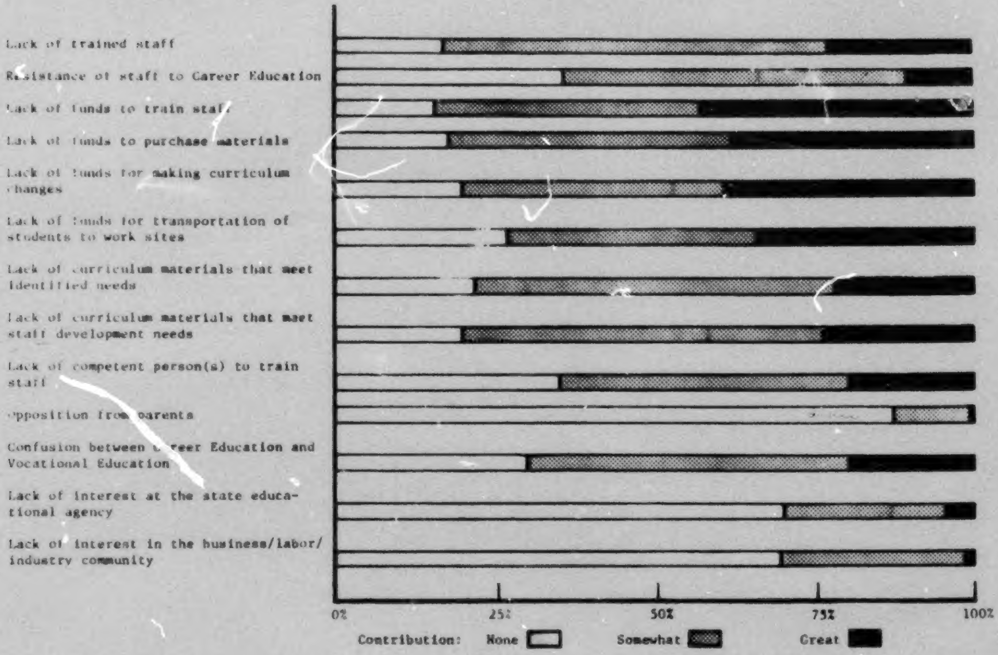

Figure 3.34. Frequencies of ratings of problems contributing to the overall difficulty in implementing career education [Q34].

usually instrumental in the success of career education programs, and that problems arose from lack of funds, materials, and general assistance from the State and Federal governments. Of those responding to an open-ended question regarding the future of career education in their districts, 54% mentioned the availability of funds as a critical factor. A survey respondent made a poignant comment on industry: "I don't see the funds being provided by industry to education to continue the training for specific kinds of work that they desire." Although these were subjective views, they were supported by the facts that (1) funding and staffing tended to occur before there was any formal local career education policy, evaluation, or advisory committee (see Section 3.4), (2) overall activity levels were correlated with funding availability (r = .29, .31, and .32, for the availability of local, Federal, and State funds, respectively), and (3) within districts serving a significant majority of the nation's students, involvement of the community as an instructional resource and in educational policymaking was occuring (see Section 3.5) and was positively correlated with career education activity.

The assistance of the State and Federal governments was most frequently rated as needed to support inservice staff development activities, as seen in Figure 3.35.* Support in making career education materials available was also a strongly rated need. Support for the placement function of career education, in terms of research to predict future job markets and of a career information network, were among the least important rated needs, corresponding to the districts' ratings of placement as the least important learner outcome of career education (see Figure 3.9). Because a major goal of career education is to prepare young people for a satisfying career which is likely to involve the world of work, this lack of emphasis on placement is an area in which there is an important discrepancy to be addressed by the career education movement. This discrepancy was being noted in districts with formal career education policies: Although only 26% of the respondents from districts without formal policies rated placement as an absolutely necessary outcome, 41% of those with formal policies on career education did so. However, the perception of need for Federal or State support of the placement function was equally lacking in both sets of districts.

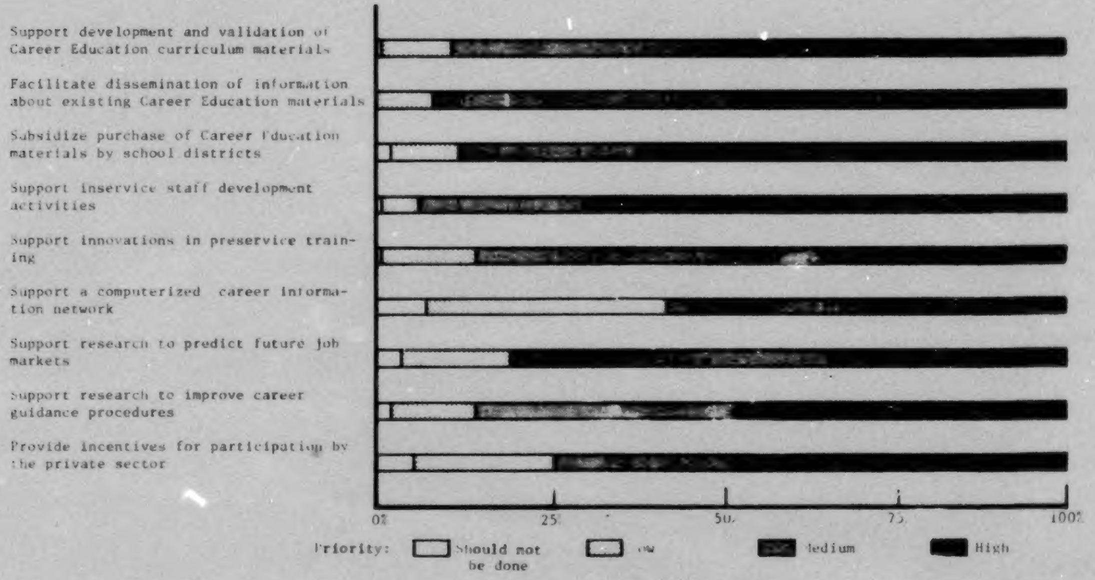

Figure 3.35. Ratings of the priorities of possible Federal and State support of career education by the survey respondents. [Q35]

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*A set of categories for rating the importance of State and Federal assistance were developed by the contractor for this project. They imply no specific intent by any agencies to focus on these areas for support action.

Many districts reported allocating funds for career education exclusive of vocational education in 1974-75. Because of the complexities of budget allocations, however, these reports are likely to contain some significant distortions. Nevertheless, we report the following as tentative results: A total of $31.5 million was reportedly allocated to career education in 860 districts serving 16.7 million students, for an average of $1.89 per student. In districts with formal career education policies, $22.8 million was spent on 8.4 million students, for an average of $2.71 per student, compared to $1.05 per student in districts without formal policies on career education. Overall, 40% of the funds were reported to be from State sources, 37% from local school budgets, 22% from the Federal government, and 1% from other sources. The percentage of districts that received funds from various sources is shown in Figure 3.36, and the comments of districts without such funds are shown in Figure 3.37.

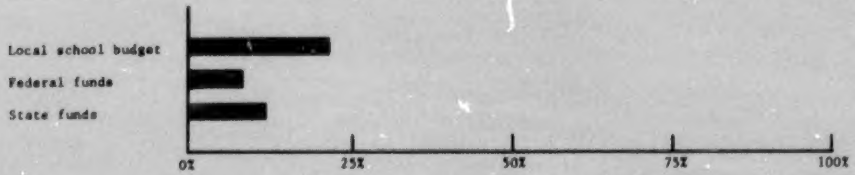

Figure 3.36. Percentages of school districts with 1974-75 career education funds from various sources (Q24).

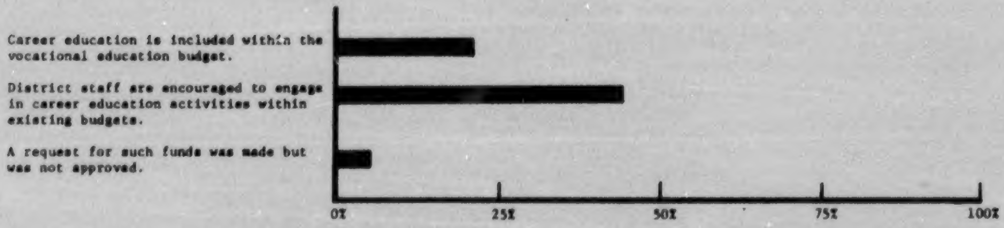

Figure 3.37. Percentages of school districts giving various explanations for the absence of funds allocated for career education. (Q24).

Although there was a significant relationship between the existence of funding and the level of career education activity in districts, there was only a small relationship between the amount of that funding beyond a threshold and the level of career education activity. Expenditures beyond about $25,000 produced small effects on overall career education activity as measured by the summary statistic used in this chapter (OCEA). This partially supports the view of at least one respondent, "if more dollars are not available, give less to more districts."

There are several conclusions from the viewpoints of the local districts as described in this section:

1. There was tentativeness in career education plans, with more acceptance of Federal guidelines in the ethnic minority and economically disadvantaged school districts; reasons for lack of career education policy statements are shown in Figure 3.4.
2. The level of career education activity was significantly higher in districts whose programs were based on the USOE guidelines.
3. Lack of funds and materials were most frequently cited as sources of difficulty in career education implementation, whereas endorsement of staff and community were frequently cited as contributors to success. On the future of career education, a high school career education coordinator commented, "...it could be extremely promising with the proper impetus--specifically, some hard cash." Another respondent wrote, "I believe no further 'demonstration funding' is needed. Sufficient projects must now exist throughout the country. Focus on getting the money for career education through to the State level and the local communities for use according to a defined State and local plan."
4. External support was felt most necessary to support inservice staff development and materials acquisition, and there was a noticeable lack of emphasis on the placement aspect of career education. especially in districts without a formal career education policy statement.
5. Although monetary results are subject to errors due to complexity, career education-specific funding was at a level of about $1.05 per student in districts without a formal career education policy statement and $2.71 in districts with such a statement, with about 40% from State funds, 37% from local funds, and 22% from Federal funds.
6. The effect of "some" funding over "none" on the level of career education activity in a district was significant, but increased

amounts of funding resulted in only modest increases in activity levels, possibly because the costs of initial activities, such as staff development sessions, are far less than the costs of later steps such as implementing career decision-making skills training for nearly all students in the district.

3.9 Status of Career Education in the Outlying Territories

A subsurvey was conducted in the six outlying Territories of the United States in order to determine whether the career education movement was penetrating to these areas and to determine how career education activities in the Territories differ from activities occurring in local school districts in the States. This survey updates results obtained in the preceding year by the CCSSO Survey of State and Territories. The methodology employed in surveying the six Territories was essentially the same as that used in the survey of local school districts. The questionnaire sent to the Territories was the one used for the local school district survey, so the data are generally comparable with the results presented in the preceding six sections. American Samoa, Guam, Puerto Rico, and the Virgin Islands returned completed questionnaires; Canal Zone wrote that they had no career education program because of a lack of outside funding support, and so felt that their response would be irrelevant; no response was received from Trust Territories of the Pacific.

According to the responses, the activities, policies, and opinions prevailing in the Territories were, for the most part, similar to those in the 50 States and District of Columbia. The following discussion will emphasize the differences.

General pervasiveness. Unlike the local school districts, the Territories had no career education learning activity at any school level in which "nearly all" of the students participated. Rather, the great majority of participation was in the 21%-80% range. More secondary level students than elementary level students were participating in career education activities.

Although 31% of the districts responding from the States offered separate career education units with academic credit, this practice had not yet been undertaken by any of the responding Territories by school year 1974-75.

In the area of management activities, two of the Territories had formal written career education policies covering both student outcome objectives and plans for organization of career education activities, but only one of these also included an evaluation plan. Reasons for lack of a formal policy were similar to those cited by the school districts in the States.

None of the responding Territories had funds specifically allocated for career education activities during 1974-75. In all cases, district staff were encouraged to work within existing budgets, and in most districts funds were appropriated from the regular vocational education budgets for this purpose.

Three of the Territories employed full- and part-time individuals specifically for work in career education. Two of them had one career education staff person for every 8.5 schools, one Territory had one person for every 2 schools, and one Territory had no such staff for its 30 schools. In two cases the responsible person had been trained primarily as a vocational education teacher; the third individual was a school administrator. In the Territory having no such staff, career education experiences were provided by vocational education and guidance/counseling staff.

Regarding the educational practices championed by the Office of Career Education, most of the Territories offered courses year-round, however they rarely awarded credit for learning/work experiences occurring outside the school. This was in contrast to practices in the school districts in the States.

Special target groups. Only one of the Territories indicated it had made special career education efforts directed at females; this took place at all three grade levels, primarily in special classes. In the area of racial bias in career education materials, three of the four responding Territories felt they had no problems in that area, whereas only 34% of the school districts in the States felt similarly. Special career education efforts for the benefit of gifted, handicapped, and mentally retarded students were rather limited, both in terms of number of Territories and the number of grade levels involved.

In contrast to the local districts in the States, much more of the effort in Territories for the special target groups was concentrated at the elementary level than at either the junior high or secondary levels.

Regarding the identification of career education materials, much greater use was made by the Territories of government and professional sources than by districts in the States. All four of the Territories utilized publications by USOE, NIE, and professional organizations, and almost all of them had attended meetings given by these groups. The ERIC and AIM/ARM clearinghouses were also used by every Territory.

Expressions of opinions and needs. The factors most frequently cited by the Territories as having contributed to the difficulty in implementing career education were lack of staff, lack of competent persons and funds with which to train staff, and lack of materials appropriate for student instruction or staff development. None of these appeared to be as important a source of difficulty for the districts in the States.

In summary, it is evident that the Territories, while showing enthusiasm for career education and a moderate degree of implementation of career education activities, have been limited in many areas of career education, particularly by lack of funds.

3.10 Special Sample of School Districts with Extensive Career Education Experience

The "special" survey of sixteen school districts judged to have experience in career education programs was conducted in order to assess community and school opinions of these programs. Appendix F of this report presents the survey results separately for each of the sixteen districts. A summary of these results is presented in this section.

The 16 districts were selected from those nominated by leaders of the career education movement as having had extensive experience implementing career education. In each of the 16 selected districts, about 20 individuals were interviewed informally. Table 3.18 summarizes the categories of individuals interviewed in each district. Most of the interviews were by telephone; at two of the districts, face-to-face onsite interviews were arranged. The purpose of the interviews was not to learn about specific activities being carried out in their career education programs, but rather to determine what were the ways in which their programs were successful--what tyes of objectives other districts should strive to emulate--and what problems they found most serious--problems that if recognized early could be averted in other districts.

Table 3.18

Summary of Contacts Made in Special School District Interviews

	Special Sample District Number																
Category	7	12	2	16	1	11	6	8	13	10	3	14	5	15	4	9	Total
School administrator	2	4	1	3	3	3	3	1	1	1	3	3	1	2	2	2	35
High school counselor	1	1	1	2	1	1	1	2	1	2	1		1	1	1	2	19
Vocational educator	2	1	1		1	1	1		2		1	1	1	1	1	2	16
Staff member	3	2	1	6	3	1		1	4	5	1	4	1	3	1	2	38
Business community	1		6		3	2	3	2	1	2	1	1	2	2	1	2	29
City government	1		1	1	1	1	1			1	2		1	1	1	2	14
Parent group	1		1	1	2	1	2	2	1	4	1	1	2	1		1	21
School board	2	2	1	2	1	1	2	2	1	2	1	1	2		1	[illegible]	22
Student body			1	13					1	13			1				29
Member of community youth group	1	1	1			1		1					2	1		1	9
Community college	1	1	1			1	1	2	1		1		1	1	1	1	13
County office of education	2	1	1		1		1	2	1	1	1	1	1	2	1	1	17
Employment office	1	2		1		2	3	1	1				1	1		2	15
Neighborhood Youth Corps				1				1					1				3
Minority organization		1				2	1	2	2	1	1		2		2		14
Women's organization		1	1		1	1	1	1	1	1		1	1	1	1	1	13
Physically handicapped organization		1	1	1		1		1			1			1		1	8
Any category not mentioned above	2		3	1		1		1	2	1			2			1	14
Total	20	18	22	32	17	20	20	22	20	34	15	13	23	18	13	22	329

Table 3.19 shows the ten most frequently reported successes and problems, organized by school district and respondent group. When the responses of community members are compared within a given district to the responses of the school district employees, considerable agreement is found. On 71% of the success items there was agreement between school district and community respondents in a given district; that is, they either both cited the particular strength or neither did. There was 65% agreement on the problem items. One goal of career education is to bring schools and their surrounding communities together for the purpose of enhancing the

relationship between education and work, and this concern is certainly reflected in the results of this survey; the fact that there was such a high percentage of agreement between educators and the community probably indicates that a considerable amount of communication was occurring. Also, several of the successes cited in the survey revolve around the topic of communication and collaboration between school and community, and problems in this system of communication also appear to be of concern to both groups, since several of the ten most often mentioned weaknesses also have to do with this same theme.

Successes. Successes most frequently brought out in the special sample interviews fall into the following conceptual groups: (1) expressions of support, (2) particular activities that have been implemented, and (3) improved student performance.

The amount of enthusiasm and support displayed by district personnel and community members was often the primary indicator of the success of the career education program. Unless most district people--teachers, counselors, administrators, students, and career education coordinators--were completely committed to the concepts behind career education, the program could not reach its full potential. Community participation was equally important; the collaboration of parents, business/labor/industry groups, and service organizations was essential in order for many of the activities to take place.

A wide variety of materials, resources, equipment, and activities were utilized in any given career education program, of course, but several emerge as extremely popular among both groups of respondents. Career centers were highly valued in the districts that had them; they were usually well-liked by students, since attendance was often voluntary, and the materials and equipment easy-to-use and modern. Hands-on activities and work experience programs, which provided exposure of students to the realities of the world of work, were universally regarded as important and helpful to the students. Another popular activity involving cooperation between community and district was the use of outside resource persons as guest speakers.

Students are supposed to derive many benefits from a well-developed career education program, and respondents were especially impressed by the following outcomes. Most often cited was the simple fact that students, through career awareness and exploration activities, were exposed to many new career options. They were not learning about careers in a vacuum; career education related regular academic curriculum to the world of work, thus giving students the realization that basic skills and their future careers were interrelated. An important by-product of these positive outcomes was that students were finding education more relevant, and many were finishing school or becoming more motivated because of the adoption of the career education program.

Problems. The problems, at first glance, appeared to be the same as the successes: if somebody was enthusiastic about an activity, somebody else in the district was likely to question it. This lack of agreement did not preclude gaining a great deal of useful information from the questions about problems.

Four types of problems were mentioned in almost every case, and a number of others were mentioned at one or more sites. The four primary problems concerned (1) funds, (2) resistance, (3) lack of coordination of efforts, and (4) tracking and academic overemphasis.

The problems with funds were the most frequently mentioned. These involved both the (continued) availability of support for programs that had been initiated with external funds and some concerns that the funds had not in every case been used for maximum benefit. The primary uses suggested for additional funds were (1) to update files of career education materials and improve Career Center facilities and (2) to support staff inservice development activities.

Resistance was in several cases referred to as a "need for better communication of the objectives of career education," in addition to numerous direct references. The resistance of school staff was along two lines: (1) that career education was eroding the teaching of other essential subjects, or (2) that it meant just one more thing for overworked staff to cope with. The first of these is the more serious: If in fact career education programs are in any way reducing the productivity of schools, that is against the principles of the movement. More effort needs to be made to develop curricula in which career education and academic objectives are mutually facilitory, not competing.

The lack of coordination was evident primarily in the complaints that overlapping responsibilities for preparing young people for work led to redundant efforts; it was also universally apparent in the complete contradiction between the responses of different individuals in the same district. For example, in one district, one respondent thought the program should be extended to younger students, to include ninth graders as well as tenth graders, while another individual in the same district complained of too much emphasis on career education at the elementary level. More community-wide communication and coordination was expressed as needed in every case.

The fourth primary problem was multifaceted. In some districts the complaint was that the emphasis in the schools was still too much on preparing students for college; in others, the complaint was raised that career education was a revival of "tracking" and was especially not likely to broaden the career opportunities of minorities. This problem stems from a long tradition of academic elitism in the school system and was exacerbated by the race for professional manpower superiority over the Russians following Sputnik. The reorientation toward the equality of work of all types, whether "professional" (an obsolete word in this context?) or not, has a long way to go in the minds of teachers, counselors, and school administrators. Such a reorientation apparently must happen, however, for career education to gain universal acceptance, according to the responses from this special sample survey.

There were a number of other problems that were mentioned in one or more school districts. The reader is referred to Appendix F for descriptions of the 16 career education programs included in the sample. Four of the problems were particularly interesting in that they are likely to occur in many other districts as they set out to implement career education. The first of these is that community members and school staff alike are asking to see the results, to have students followed up after leaving school to see if they benefited from their career education experiences.

A second problem is that in a time of decreasing enrollments and teacher layoffs, innovative programs in the hands of young teachers are the first to suffer from the effects of seniority in hiring and firing actions. Such rigid rules, which are always questionable, can in the case of educational innovation be lethal to a movement. The third problem, mentioned by students in one district, is that although "hands-on work experience" is rated a strength of most career education programs, these students are in fact competing with the adult labor force for jobs. That problem is not a simple one to solve, and it is likely to be much more frequently voiced as career education gains widespread implementation. The other problem of note was that a career center can turn into a "dumping ground" of youths who want to "goof off," if its role is not supported and reinforced by classroom teachers, who may need to accompany their students to the center.

It is to be hoped that as many new districts begin to implement career education, they can use the information from these frank responses of the 16 school districts in order to avoid many of the same problems in their districts.

3.11 Summary

In order to provide information on the status of career education in all schools throughout the country, a survey was made in 1974-75 of 900 representative school districts, selected from all States, from different types of communities, from white and ethnic minority areas, and from affluent and socioeconomically disadvantaged areas. The sample was selected completely without regard to actual career education programs in the districts, so as to provide objective, unbiased estimates of the amount and kinds of activities being carried on to help young people learn about and prepare to engage in work as a part of their way of living.

The broad questions about career education addressed by the survey were (1) how much was happening, (2) which activities were most prevalent, (3) what roles were played by individuals in the school districts, (4) whether there was equal implementation in all sectors of society, (5) whether special efforts were being made to broaden the career opportunities of women, of ethnic minorities, and of the gifted and the handicapped, and (6) what factors contributed to the success of career education and what the problems were.

The results of the survey indicated that career education was gradually being considered and implemented throughout the country. Although 60% of the school districts in the nation described their efforts as "now limited," the nine learner outcomes proposed for career education (USOE, 1975) were all rated as between "important" and "absolutely necessary." Twenty percent of the nation's teachers were involved in career education staff development activities during the 1974-75 school year; 57% of the nation's districts had at least some staff members involved in such activities. On the other hand, only 3% of the districts had taken all the five steps in implementing career education--assigning staff time, allocating funds, generating a formal policy statement, establishing a formal Advisory Committee, and performing objective evaluations of their career education activities. Of 15 learner activities in career education, 52% of the nation's students were in districts where at least one was broadly implemented, 21% were in districts where over half were broadly implemented, but only 3% were in districts where all were broadly implemented. There was a clear distinction between districts with formal career education policy statements, in which there was an average of $2.71 spent per student on career education in 1974-75, and other districts, where only $1.05 was spent per student.

The responses to the survey indicated a dichotomy in activities to help young people learn about and prepare for work: (1) activities that have been carried on traditionally as part of the schools' objectives to prepare their students for adulthood, and (2) innovative activities related to the current career education movement. In some cases the activities may appear to be quite similar, although the conceptualization behind them may be quite different. Identifying the innovative activities roughly as those tending most to occur in districts with formal career education policies, these activities tended to be carried out by teachers rather than counselors, and they tended to occur in the lower grades rather than in high school. In other words, the innovations were getting the lower grades involved in making school experiences more relevant to the world of work. Overall, there are still more activities at the high school level than at the elementary level to help prepare young people for engaging in work.

The overall level of career education activity was greater in districts with career education policy statements and with more people assigned to career education staffs. The most prevalent aspect of career education in practice in 1974-75 was staff development; staff development activities were significantly correlated with activities for students; and the need for more staff development was perceived as the most important way in which State or Federal assistance could be used. Staff development was most successful when it involved presentations by local staff experts, and among the clearest indicators of a high level of career education implementation was the local development by the school staff of materials to use for career education in the classrooms. This emphasis on local responsibility shows a level of solid enthusiasm for career education--although most districts would welcome external funding for their activities and many state that such funding was crucial to the future of their career education programs.

Increasing the involvement of the work community in educational policymaking and as instructional resources was a key ingredient for extensive career education implementation. The learner activities most frequently rated effective for career education were those that brought students together with individuals in the work world. Support of parents and of the business, labor, and industrial community were frequently rated as contributors to the success of career education programs; disinterest or opposition from these segments of the community was rarely a significant problem. Resistance from school staff was more frequently cited as at least somewhat of a problem--although staff support was also a contributor to successful programs.

Among the nine career education learner outcomes, the one clearly perceived as most important was the teaching of basic skills, which are necessary for adapting to our rapidly changing society, and the one perceived least frequently as absolutely necessary was successful placement of students graduating or leaving school. On the other hand, the percentages of students going on to further education, including four-year colleges and universities, as well as going on to full-time employment, were positively correlated with local levels of career education activity.

An important result of the survey was that while implementation of career education was essentially equal across other dimensions, there was much greater implementation in districts with large enrollments than in districts with small enrollmements. A number of factors were identified as possible contributors to that difference, including both the priorities perceived by the districts and the resources available to the districts. Although there were no significant differences in career education implementation levels between affluent and economically disadvantaged districts, the concepts were less frequently considered controversial in the latter districts. Between white and minority districts, there was slightly more career education activity in minority districts; however, closer careful analysis revealed that this effect was due to the enrollment size effect just mentioned: ethnic minority members tend to be in larger school districts. Within each of the categories of large, medium, and small districts, there was no difference in the level of career education activity between predominantly white and minority districts.

Finally, there were special efforts made to broaden the career opportunities of women, of ethnic minority members, and of handicapped students. However, these efforts were not universal, nor was attention to the problems of these groups particularly associated with having a formal career education policy. For example, vocational education classes continued to have quite sex-stereotyped enrollment patterns.

Because of the diverse facets of the career education phenomenon, it is impossible to summarize all of these results in a single, straightforward answer to the question of how far the schools have come and how far they have to go to achieve comprehensive career education for all young people. However, a rough estimate based on the weighing of the many percentages presented in this chapter is that they have come about 15% of the way.

CHAPTER 4

Status of Career Education in the State Education Agencies

4.1 Introduction

The fifty State education agencies have long played central roles in the planning, coordination, support, and evaluation of the activities of the schools in their regions of jurisdiction. In the area of career education the States have been particularly active in the early and middle 1970s. This fact was demonstrated in the survey of the States carried out by the Council of Chief State School Officers in 1974 (CCSSO, 1975b), which found many States to be allocating funds and staff to career education programs. The lack of prior data with which that survey could be compared demonstrated the need for continuing, periodic assessment to provide estimates of growth rates. The present survey, conducted at the end of 1975, was able to build upon the prior work of the CCSSO to provide a clearer picture of the role of the State education agencies in career education and of the growth of that role. Moreover, the simultaneous collection of data from the State education agencies and from the local school districts provided a more comprehensive view of career education, in which questions about the relations between local and State activities could be addressed.

The present State education agency survey was not designed to provide information, such as percentages of pupil involvement in career education in the States, to validate the simultaneous local school district survey, but rather to assess the activities occurring at the State education agency level. It was designed to answer three broad questions, which are relevant to the concern of Congress that a comprehensive picture of career education be developed. The three questions, or clusters of questions, are the following:

1. At the State education agencies, how much activity in career education was occurring in 1975, what did the activities consist of, and how did the levels of activity compare with the prior survey?

In the 1974 Congressional legislation on career education, the roles of the States and the local school districts were given equal emphasis. The comprehensive assessment of the status of the career education activities referred to in that legislation must therefore include State-level activities as well as local activities. The central role envisioned for the States in proposed career education legislation attaches an urgency to the need for updating the information from the CCSSO baseline survey. If little has occurred, then the enthusiasm of the States for career education can be questioned; on the other hand, if primary steps such as staffing, budgeting, policy formation, activity planning, and State legislation have all been implemented, the stage is set for dramatic implementation in the local school districts through the State educational framework. If particular steps were lagging, legislation to remedy the situation might be called for.

2. Were career education activities in local school districts related to State education agency actions?

This is one of the most important questions of the project, and one of the most difficult to answer. If steps taken at the State level were found to be unrelated to the levels of activity in local school districts, the wisdom of implementing career education through State education agencies would be questionable. If some steps were more effective than others, in terms of greater frequency of career education implementation, those are the steps that should be focused upon and expanded if career education implementation is to be successful. The answer to this question is based (1) on questions in the survey of local school districts concerning State assistance and (2) on the comparison of responses at the State and local levels in each State. The first of these data sources is crucial because the particular natures of State activities and of this survey, each tending to focus on a small set of the districts in each State, reduce the comparability of State and local questionnaire responses. Because the survey of local school districts included only one in twenty districts, and because a significant part of many State efforts was in support of demonstration projects in a few of the State's districts, the probability of the results of a State's major efforts being included in the survey of local school districts was small and quite variable from State to State. By sampling only 5% of the nation's districts in order to minimize the burden of response, the local school district survey was explicitly not designed to have the scope of supporting comparisons between States. That design constraint somewhat limits the thoroughness with which this question can be answered. However, because questions on State assistance were included in the local school survey, adequate answers can be provided.

3. To what extent did the priorities of each State education agency for career education activity match those of local school districts and of other States?

If the priorities of the State agencies differed significantly from those of the local school districts, then a communication problem or a basic conflict would have to be dealt with. If the priorities were related, then it would be a reasonable assumption that programs carried out under State control would be directed toward achieving the objectives of the local school districts, the ultimate policy units in actual realization of career education activities in the classrooms and in the communities.

The other aspect of this questionnaire concerns variation of priorities between States. Congress has mandated that each State develop career education programs "best suited to the needs of the children served by them." (PL 93-380, Section 406) An important consideration in Federal policy is whether or not there is substantial agreement among the States on priorities. If all States have similar priorities, then Federal programs can be more efficiently targeted at the areas of unanimous high priority. If they differ, however, Federal programs must be carefully designed to assist each State to achieve its own objectives while providing national leadership in the evolution and improvement of career education.

These three broad questions provide the basis for the analyses presented in this chapter. Further implications of the data are discussed in Chapter 8 as they relate to the legislative recommendations of the National Advisory Council for Career Education.

4.2 Methodology

In order to assist the Executive Office of Chief State School Officers in carrying out this survey, American Institutes for Research adapted a ten-item State questionnaire from its forty-item questionnaire used in the survey of local school districts. Questionnaires were mailed to the 50 State Career Education Coordinators in November 1975, and final responses were obtained in early April 1976. In a few cases, the questionnaire was filled out during a telephone interview.

The questionnaire requested information on funding sources and uses, on staff size and background, on legislation, on written policies, on the existence and makeup of formal advisory committees, on evaluation methods, on the types of assistance to local school districts, and on perceptions of priorities for State and Federal action in career education. The format of the questions matched the format of the local school district survey instrument items as closely as possible. The questionnaire is reproduced in Appendix C along with the responses of each State to the questions.

The analyses presented in this chapter are based both on the responses to this questionnaire and on relevant information from the local school district survey. As mentioned above in the discussion of the second topical question for the chapter, the possibilities for direct cross-validation of responses were limited by the fact that both this school district survey and major career education efforts by the State education agencies reached only a fraction of the districts in most States, so that the overlap was quite small and variable from State to State.

RESULTS

4.3 *At the State education agencies, how much activity in career education was occurring in 1974-75, of what did the activities consist, and how did the levels of activity compare with the prior survey?*

The frequencies of responses to the major questions are given in Table 4.1. Although funds of more than $50,000 were spent for career education in all but a handful of States in 1974-75, in only 12 States were these specifically designated as "career education" funds in the budget. In half of the States, funds were allocated to assist local school district career education programs, more so in States with funds designated for career education in the budget. The total amount of funds spent for career education reported by the States was, very roughly, $40 million. (Twenty States acknowledged specifically that their estimates were approximate, and the relationship between career education funds and vocational education funds remains somewhat nebulous.) This corresponds to rough estimates from the local school district survey that $40 million was received in support of career education from sources outside the school district in addition to $20 million from local budgets. These estimates are very rough, and are included only to indicate the order of magnitude

Table 4.1

Number of States Taking Specific Steps
to Implement Career Education

	No. of States
Full-time Staff allocation	28
Funding	
available for career education	45-49
appropriated specifically for career education	12
Policy statements	42
Advisory committees	18
Legislation specifically for career education	9
Evaluation	30

of total expenditures for career education in 1974-75. The nebulous distinction between career education funds and vocational education funds arises from the fact that career education was strongly supported at its inception by vocational educators, as an innovative extension of their roles in the schools. Over half the States specifically mentioned parts B, C, D, and/or I of the Vocational Education Amendments as a principal source of career education funds, and 14 of the States mentioned ESEA Titles III and/or IV as funding sources. As career education is gradually established as a separate item in State and Federal budgets, innovators may be expected to seek funds for their projects from all sources; however, until some distinction is made between vocational and career education, specific conclusions about overall funding levels will be quite difficult to reach.

The relative contribution of the States, according to the local school districts, averaged 40% of their career education funding in 1974-75, compared to 37% from local funds, 22% from Federal funds, and 1% from other sources. Thus, the States were playing a central role in the management and allocation of financial support for career education in the last year.

In the area of staffing, there were specific full-time State-level career education staffs reported in 28 States. Half of these consisted of a single person. Individuals involved in coordinating State-level career education activities had various backgrounds. They included 15 counselors, 15 non-vocational teachers, 10 vocational teachers, 9 school administrators, and 7 with experience in business, labor, or industry. An important aspect of these career education staffs is that they tended to precede State legislation and State budgeting specifically for career education, rather than being hired after the passage of laws and allocation of funds.

On the formal aspects of career education at the State level, although there were formal written policies in 42 States, there were formal Advisory Committees in only 18 and legislation specifically for career education in only 9. The number of States with formal policies on career education has steadily increased over the period since 1972; 2 States adopted policies prior to 1972, 13 adopted policies in 1972, and about 5 more adopted policies each year after 1972 including those planned for the 1976-77 school year. About two-thirds of the formal policies included plans for organizing activities in the State and, of those, two-thirds included evaluation plans.

The number of Advisory Committees had increased by a net gain of four since the CCSSO survey in 1974--seven new ones and three that were reported in 1974 but not in late 1975. In almost every State Advisory Committee, there was participation of local school district representatives and members of the work world outside the schools. The States with Advisory Committees were making efforts through the committees to increase communication among the many roles involved in career education.

The legislative situation in the States had not changed noticeably in the year between the prior CCSSO survey and the current survey. Slightly different wordings of the questions leaves the possibility of a few changes; however, there was certainly no evidence of great change.* In a single State, Oregon, legislation pending in 1974 was apparently considered an existing mandate in 1975. A comparison of the years of adoption of formal policies and laws on career education indicated that either the former preceded the latter or they were concurrent, suggesting that a formal career education policy statement, in addition to an existing working staff in the State education agency, may have been a prerequisite for legislative action.

Finally, evaluation in career education presents a confused picture. Because part of the message of career educators is that the schools must pay greater heed to the outcomes of their activities in terms of better-prepared alumni, this movement even more than other educational reforms incorporates program evaluation as a fundamental component of the role of the schools. The role of the States in this evaluation has been proposed as central because they constitute units sufficiently large to carry out comparative evaluations yet sufficiently homogeneous in objectives to be able to develop single Statewide evaluation plans. In accordance with this view, according to the prior CCSSO survey 30 States had collected data for evaluations of local career education programs; the current survey found that 30 States conducted some form of formal evaluation of career education in the 1974-75 school year. Of the 30 States with evaluations according to the first CCSSO survey, 13 did not continue to evaluate in 1974-75 but 13 States that had not previously evaluated career education did so in 1974-75; thus a total of 43 States responded positively to evaluation questions on one or both of the surveys. However, evaluations may be subjective or objective. A critical dimension of evaluation for career education, some would say the fundamental dimension, is how well students are prepared to cope intelligently with and succeed in the world of work when they leave school. This is an extremely difficult question to answer, and the necessary evaluation techniques probably do not yet exist, but a start must be made. Only 13 States reported the use of standardized tests of career development in evaluating career education and only 7 used the ratings of alumni after a year or more outside the school and in the world of work. If career education, like any reform, is to improve rather than stagnate, more thorough evaluation must be included in the design of career education implementations. Moreover, evaluation through continued contact with alumni is particularly appropriate as a means of opening the avenues of communication between schools and the communities they serve--their alumni.

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*A recommendation for future surveys is that in asking questions about legislation, a request for an identifying number for the law or bill be included, so that unambiguous comparisons can be made, and incidentally, so that copies of the documents can be more easily acquired.

4.4 *Were career education activities in local school districts related to State education agency actions?*

References to States were made in 7 of the 40 items in the local school district survey, and the correlations of positive responses to these questions with the overall level of career education activity (OCEA) in the districts are given in Table 4.2. The correlations were all significantly positive, indicating that more activity in preparing young people for careers was occurring in school districts that felt the impact of State assistance in career education. The correlations might have been positive because State assistance led to greater activity in career education or because local districts having extensive career education programs might seek out State assistance more frequently.

Table 4.2

Correlations Between Positive References to State Assistance and Levels of Career Education Activity, in Local Districts

	Correlation with overall level of career education activity (OCEA)
State meetings a source of materials (Q10)	.37
State publications a source of materials (Q10)	.24
Use of State funds for career education (Q24)	.32
Staff development activities involving presentations by State career education experts (Q21)	
on concepts	.59
on teaching techniques	.51
on materials	.51
on evaluation	.45
on community resources	.40
Familiarity with State career education legislation (Q36)	.26
Familiarity with State career education coordinator (Q36)	.35

Note. The numbers shown in parentheses are the questions numbers on the local school district survey questionnaire.

In the area of funding, the correlation of State assistance with overall career education activity was about the same as for Federal or local funds. In the area of staff development activities also, presentations by State career education experts were about as effective as the half dozen other most effective methods for inservice staff development. Among the sources of career education curriculum materials, State meetings tended to be used by districts with high career education activity levels more than the other sources. On the question of familiarity with aspects of career education outside the local district, familiarity with the State coordinator of career education was slightly more correlated with overall activity than were the other aspects assessed in question 36 of the local school district questionnaire, but familiarity with State career education legislation was less correlated than were the other aspects. Finally, State education agency assistance and interest were not rated as particularly related to success (Q 33) in districts with a great deal of career education activity. In summary, there were positive correlations indicating that may factors, of which State-level assistance was one, contributed to the success of local programs.

What of the correlations between State survey and local survey responses? As mentioned in the introduction section, these would tend to be spuriously low because the local school district survey included only 5% of the State's districts on the average, and the overlap of that sample with the demonstration projects where States were undoubtedly having their greatest impact was inevitably very small. The local school district survey was not designed to support comparisons between States, and as a result, the relations between the State and local surveys are difficult to assess. The correlations between local school district levels of activity and State education agency responses on legislation, funding, policies, assistance to districts, and advisory committees were all positive but not statistically significant. These small correlations are surprising, in view of the significant correlations found between local levels of career education activity and acknowledgement of State contributions by the local district respondents. The most plausible explanation of this apparent discrepancy in the relation of local activities to State activities is that the State education agencies were having significant impact on some but not the majority of the districts in their jurisdiction, and in some States those districts with greatest impact were in the sample and in others they were not. This explanation is plausible because most support for career education has been in terms of small numbers of demonstration projects. As noted in the previous section many States listed Federal support for exemplary projects as a primary service of career education funding. There was, on the other hand, a significant correlation between State career education staff size and average local career education activity level; presumably the State education agencies with large staffs were having effects on greater percentages of the districts in their States and therefore on some of the districts in the local district survey sample.

In summary, the results of the combination of the State and local surveys support the conclusions that (1) in districts with high levels of career education activity, State programs tended to be a contributing factor, although not more crucially than other factors, and (2) in the 1974-75 school year there was generally a great deal of variability of impact on local district career education activities within each State.

4.5 *To what extent did the career education priorities of each State education agency match those of the local school districts and of other States?*

In order to assess the perceived needs of the local and State education agencies, a set of types of assistance was listed in the questionnaire and respondents were asked to rank each type as of high, medium, or low priority. The types of assistance listed were chosen for this study by the contractor and bear only coincidental relationship to any given State or Federal plans to provide such assistance. Figure 4.1 gives the relative frequencies of priorities for eight types of assistance that are common to the questions on local priorities for State or Federal aid and on State priorities in helping local districts. Although the local districts rated such support as of overall higher priority, the average profiles of local districts' needs and State priorities for assisting local districts were correlated. The highest priority was for support of inservice staff development in both cases. There was also emphasis on curriculum materials; however, local school districts were most interested in being provided with subsidies for purchasing materials, and the State education agencies were more interested in developing, validating, and disseminating information about materials. Both State and local education agencies agreed that research support and incentives for private sector participation should have lower priority.

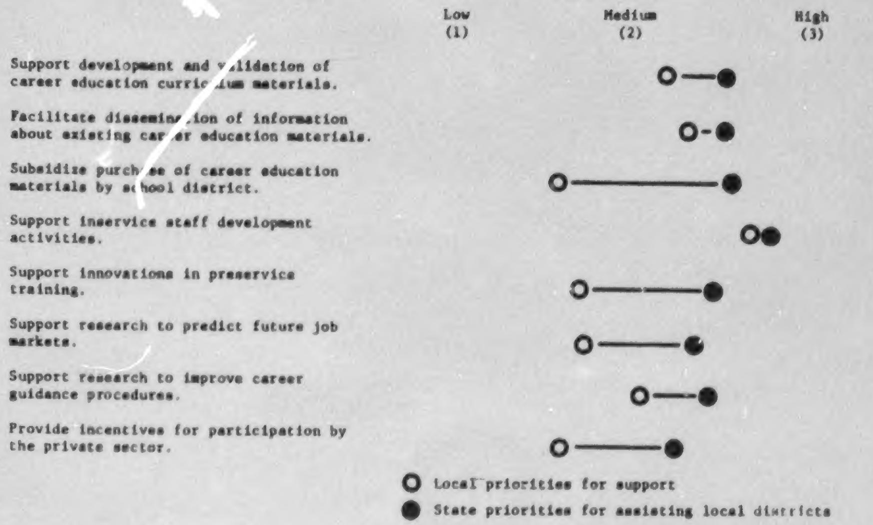

Figure 4.1. Average ratings of priorities for assistance to local school districts in eight areas, as rated by the local districts and by the State education agencies.

The priorities that States rated for Federal support are given in Figure 4.2 and show similar trends. However, States were especially interested in having the Federal government play a unifying leadership role. As one State education agency stated the need, "One major problem

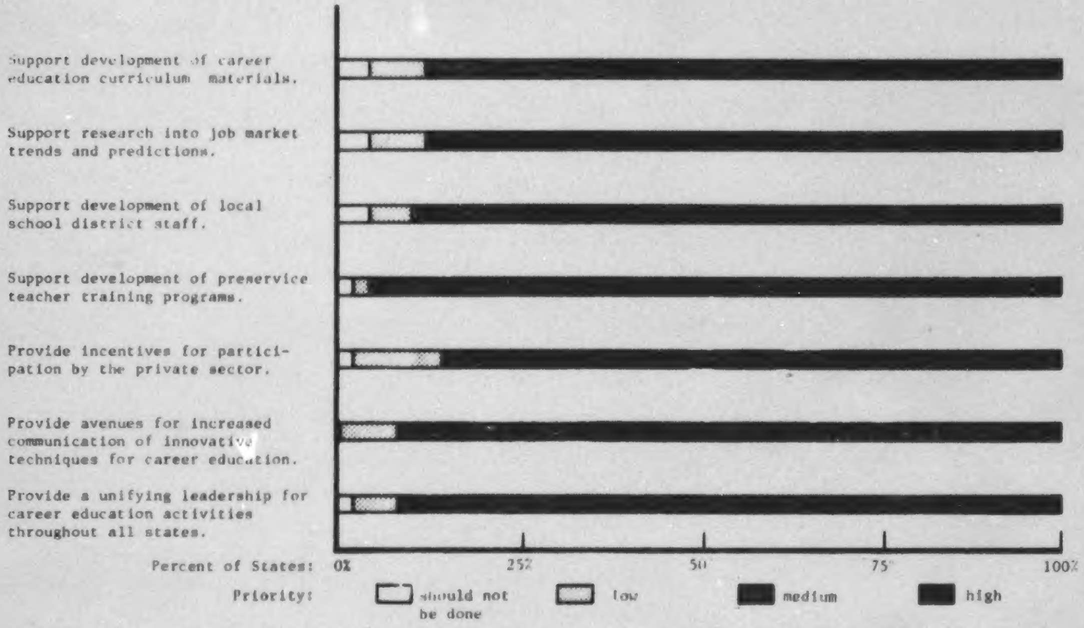

Figure 4.2. Frequencies of priority ratings by State education agencies for Federal career education support.

at any State level is that of linkages; a process must be developed to establish links to many kinds of ongoing programs such as Bilingual, Handicapped, and Adult Education." The States were also interested in having the Federal government support teacher training program innovations, and less interested in having them support relevant research or provide incentives for private sector participation.

The matches between the States for priorities for helping local districts were not particularly close, as can be seen in Figure 4.3. For each type of assistance at least 10% of the responses were in each category: high, medium, and low. The closest approach to unanimity was that 80% of the ratings of support for inservice staff development were "high priority"; and the greatest diversity was in support for research to improve career guidance, with 32% rating it high priority and 25% rating it low priority. Whether the observed diversity of priorities is a sign that the needs of students in different States are really different or a sign that more leadership is needed at the Federal level to unify the States' priorities is an important question not answered by these data.

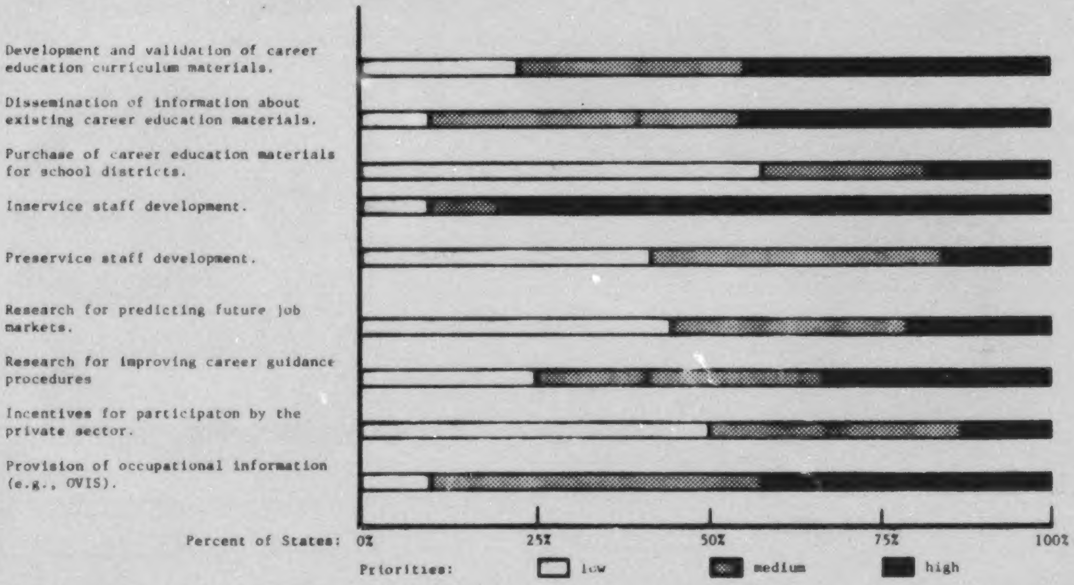

Figure 4.3. Frequencies of priority rankings by State education agencies for local career education assistance [Q8].

4.6 Summary

A survey of career education activities of the State education agencies was undertaken by the Chief State School Officers in conjunction with the American Institutes for Research to update the results of a previous survey by CCSSO. The survey addressed three broad questions: what career education activities were being undertaken by the State education agencies, how these activities related to activities in local school districts within the States, and how the priorities of the States differed from each other and from those of the local districts.

All 50 States responded either to a 10-item questionnaire adapted from the local school district survey instrument and mailed by CCSSO or to a telephone administration of the questionnaire, between November 1975 and April 1976.

Career education funding and formal policy statements existed in most States; however, legislation, Advisory Committees, and specific budget designations for career education were less common. There was little change in legislation during the year between the earlier CCSSO survey and the present survey. Career education evaluation activities were present in most States; however, their level of sophistication varied greatly. As a single generalization of these results, there was a remarkable variation of activities among the States as each State strove to develop its own approach to career education.

Acknowledgment of State-level contributions by the respondents to the local school district survey was related to the level of activity in those districts. However, the impact of State assistance did not appear to be greater than other factors for local program success. There was evidence to support the conclusion that in the majority of States, the career education activities of the State education agency in 1974-75 had varying levels of impact actoss the districts in a State; State-level activities may frequently have been focused on a small number of demonstration projects.

Finally, the career education priorities of the States and local districts generally matched; however, there were important differences in priorities between the States. Generally the highest priority was for inservice staff development support, and the availability of career education curriculum materials was also a high priority need.

CHAPTER 5

The Status of Career Education in the Colleges of Teacher Education

5.1 Introduction

If career education as a movement is to go beyond the development of materials containing information about occupations, beyond an increased emphasis on field trips and guest lecturers from the work world, beyond work experience programs to deal with students who otherwise might drop out of school, then it must involve a reorientation of the objectives and activities of all teachers, counselors, and school administrators. A purpose of the Federal support for career education was for "providing for the training and retraining of persons for conducting career education programs" (Public Law 93-380, 406:6:5). The training required for that is most naturally the role of the teacher training institutions, both through preservice training and through inservice staff development programs. Therefore, there is an apparent need to know how many and what kinds of activities were being carried on in these institutions to promote the training of career educators. A component of this nationwise assessment was the survey of the membership of the American Association of Colleges for Teacher Education, which includes institutions that train over 90% of the nation's K-12 teachers.

There are three broad questions to be addressed by this survey. They parallel the types of questions discussed in the two preceding chapters.

1. How prevalent were career education programs for K-12 school personnel in the teacher training institutions?

The answer to this question is not simply the number of career education certification or degree programs throughout the country, but rather an analysis of the breadth and depth of activities in the schools, a comparison of programs in different types of teacher training institutions, and a summary of the sources and uses of funds for activities related to career education. If the answer is that most institutions have broadly implemented career education into their school programs, then the means for achieving staff development in career education are at hand. However, if schools of education are hesitant about such implementation, then steps must be taken to generate the enthusiasm for career education in these institutions that is found in local school districts and State education agencies throughout the country.

2. What types of activities are characteristic of career educator training programs?

Career educator* training in teacher training institutions can mean many things. The type of methods employed, the formality of "career education" as a specialty or degree program, the focus on particular categories of educators, and the general faculty involvement in career education through research and development are all aspects of the answer to this question. If innovative methods are employed, if career education is a central training area, if career educator training is provided to all categories of school staff, and if most faculty members are enthusiastically involved and supported by their administrators in career education, that would show impressive growth. If, on the other hand, career education is applied in name to traditional training methods, if it is a topic treated briefly in passing in coursework or a topic reserved for a few specialists, or if the acceptance by the faculty and administrators is minimal, that would show the need for some impressive growth.

A final aspect of this question is whether the student outcomes that teacher training institutions are training their clients to produce match the student outcomes viewed by local school districts as important, especially as they relate to career education.

3. What factors have contributed to the success of career educator training programs, and what problems have been salient in these programs?

If these factors can be identified, then specific actions can be taken to enhance the success of career education programs in teacher training institutions while reducing the difficulties.

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*We use the term "career educator" in this chapter to refer not to a new specialty of teaching or counseling but rather as a device to avoid ambiguity in discussing career education programs at teacher training institutions. These programs might otherwise be taken to include programs for "career educating" the college students in the teacher training programs. "Career educators" refers here to all graduates of those teacher and training programs that include activities to prepare them to carry out career education activities in the K-12 setting.

These three broad questions serve to organize the discussion of the results of the survey of schools of teacher education carried out as a part of this project.

5.2 Methodology

The survey of career education in teacher education was conducted by the American Association of Colleges for Teacher Education (AACTE) in cooperation with the American Institutes for Research (AIR), for the U.S. Office of Education and the National Advisory Council for Career Education. The purpose of the survey was to assess the status of programs in schools, colleges, and departments of education* for training education personnel in career education, both in terms of actual activities in the 1974-75 school year and in terms of plans for the 1975-76 school year.

The data were gathered through the use of a seven-page questionnaire, a copy of which appears in Appendix D. The questionnaire was developed jointly by AACTE, the AIR project staff, and the U.S. Office of Education (USOE). After approval by the Office of Management and Budget, the instrument was distributed in November 1975 to the AACTE Chief Institutional Representative in each of the 839 institutions of higher education holding membership in AACTE.

Follow-up of nonresponding institutions was effected through the use of a reminder card, which was mailed in December 1975. With the assistance of AIR staff, a second, telephone, follow-up was carried out. A third and final follow-up of nonrespondents was conducted through a special mailing by USOE, yielding an additional 57 usable returns and resulting in responses from 630, or 75%, of the survey population of 839.** Returns were edited by AACTE staff, data were keyed and key-verified, and data reduction and analysis were performed by computer.

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*In the remainder of this chapter, the phrase "school of education" will be used to denote these units within institutions of higher education.

**Because code numbers were not placed on outgoing materials during the third follow-up, 22 returns could not be identified as to institution name or type. The data from these returns are included in all analyses where type of institution is not a dimension.

The relationship between the distribution of institution types represented by those participating in the survey and all institutions receiving questionnaires is shown in Table 5.1. This comparison reveals no substantial difference in proportions of institution types returning questionnaires as compared with those among all institutions receiving them. However, since failure to respond may be attributed to a variety of factors some of which may relate to the questionnaire content--such as disinterest or inactivity in the survey topic--inferences from survey data that generalize to all members of AACTE are not guaranteed to be precise; it is likely that the survey data at least represent institutions that are interested or active in career education personnel development.

Table 5.1

Distribution by Type of Survey Respondents and All Institutions

	Survey Respondents		All Institutions	
Institution Type	Number	Percentage	Number	Percentage
Private nondenominational	104	17	144	17
Private denominational	198	31	295	35
Municipal	7	1	12	1
State	243	39	319	38
Land-grant	51	8	69	8
Unclassified	27	4	--	--
Totals	630		839	

5.3 *How prevalent were career education programs for K-12 school personnel in the teacher training institutions?*

Among the 630 schools of education participating in the survey, 71% were actively discussing the concept of career education. These discussions had resulted in 10% of the teacher training institutions having developed formal positions on career education for their schools of education. Of the 64 institutions having formal positions, 83% judged that their positions were in full agreement with that of the USOE (1975) policy paper on career education; 14% indicated some agreement; 3% indicated no agreement. An additional 28% of the schools of education indicated that career education was not being actively discussed, and 2 schools had considered and rejected it as inapplicable for their school.

An analysis by institution type revealed that a substantially larger proportion of public institutions than private ones were actively discussing career education. Of 302 private institutions responding, only 62% were involved in career education, while of 271 public ones, 82% were involved. No substantial difference in this phenomenon was perceivable between denominational vs. nondenominational private, or between State and municipal vs. land-grant public institutions. Consistent with the above data, two-thirds of the institutions that had developed a formal position on career education were public ones, although the frequencies were relatively small (43 public and 21 private institutions). The levels of agreement with the USOE (1975) policy paper on career education did not vary substantially between public and private institutions or between subsets of these two groups of institutions.

Survey participants were asked to identify the sources of funding that supported their career education instructional activities in education personnel development. Of the 630 survey participants, 234 (37%) checked at least one funding source for career education personnel development. The number of institutions receiving support from eight source categories, and for the academic years 1974-75 and 1975-76, appear in Table 5.2. These data reveal that the numbers receiving support for career education programs remained fairly stable from the first year to the second, for all categories of funding sources.

Table 5.2

Numbers of Schools of Education Reporting Various Funding Sources for Instructional Activities in Career Education Personnel Development

	Number of Schools of Education	
Funding Source	1974-75	1975-76
Federal government funds	49	46
State program funds	110	98
State R&D funds	23	24
Foundation grants	13	11
Endowments, tuition, fees, etc.	55	55
School district funds	45	41
Other	31	30

State program funds were the most predominant source, with 98 (42%) of responding institutions receiving State program funds in 1975-76. The largest decrease in the number of institutions from 1974-75 to 1975-76 appeared in the State program funds category, which showed a change from 110 in the first year to 98 in the second, or a decrease of about 10%. Analysis of these data by institution type revealed no substantial variation from these generalizations.

Only 194 survey participants (31%) offered data about internal resource allocation for career education personnel development. Estimates of the proportion of the total teacher education budget allocated for career education during 1974-75 and 1975-76 ranged from 0% to 30%. The modal value among institutions that responded other than zero was between 1% and 3% of the total budget, and nearly all responding institutions reported an allocation of less than 11%. The modal value remains fairly consistent when viewed by institution type, although the mean percentage for private nondenominational institutions is slightly higher--around 4%. The estimates are essentially the same for both academic years. The data appear in Table 5.3.

Table 5.3

Distributions of Schools of Education in Terms of Percent of Total Teacher Education Budgets Allocated for Career Education

Percent of Teacher Education Budget*	Percent of Schools of Education 1974-75 (n=188)	1975-76 (n=193)
0	18%	18%
1-3	57%	54%
4-6	16%	16%
7-10	5%	7%
11-20	2%	2%
21-30	2%	2%

*Note. Because of severe skewness of these distributions, the class intervals are not of equal size.

5.4 *What types of activities are characteristic of career educator training programs?*

The responding institutions reported using a variety of instructional materials in their career education efforts, and these methods were found to be employed in all types of course organization. The method and organization types appear in Table 5.4 along with the number of institutions using each method within each type of course structure. The total number of institutions represented in Table 5.4 is 505, which is 80% of the institutions participating in the survey.

These data reveal that the more traditional, in-school methods were the most frequently employed regardless of course organization. Generally, as methods were increasingly field or community based, so the number of institutions employing them decreased. Career education as a subtopic in courses not primarily designed for career education was the predominant course structure. Next most frequent was the provision of career education courses within various academic departments. Interdepartmental courses in career education were reported by 73 institutions, while 28 of the 505 responding institutions offered a degree program leading to certification in career education.

Although the numbers were small, degree programs were offered by approximately the same proportion of institutions of each type and subtype (range was from 4% to 7%). Among the 28 identifiable institutions with career education degree programs were 4 private nondenominational, 8 private denominational, 12 State, and 4 land-grant institutions. The in-school methods predominated among them. One of the State institutions reported offering only graduate degrees (M.A. and Ed.S.) in career education.

A checklist, created by analyzing the outcome statements of the USOE (1975) policy paper on career education, was employed to determine the relative importance that the schools of education place on training education personnel to foster career education-related public school outcomes. The list appears in Figure 5.1 along with the frequencies of the total number of ratings within each outcome statement from 548 (87%) survey participants who registered their opinions. The frequencies suggest that entry skills stand out as least critical, although still important, and that the "three Rs" are most critical, with work habits a close second.

Table 5.4

Modes and Methods Employed by Schools of Education in Implementing Career Education

Modes of Implementing Career Education	Methods Employed for Career Education: In-school lectures, discussion, in-school exploration of career education, and use of textbooks	Use of guest speakers who represent business/labor unions/government in the community	Interviewing of employers and employees in the community	Field trips to businesses	Work experience other than teaching	Other
A degree program leading to certification in career education	25	17	11	11	16	24
Career education courses within various academic departments (including the school of education)	176	152	101	110	76	24
Interdepartmental courses in career education	73	50	28	37	28	23
Career education treated as a subtopic in a course not primarily designed for career education	323	210	103	109	78	20
Other	72	63	51	42	30	28

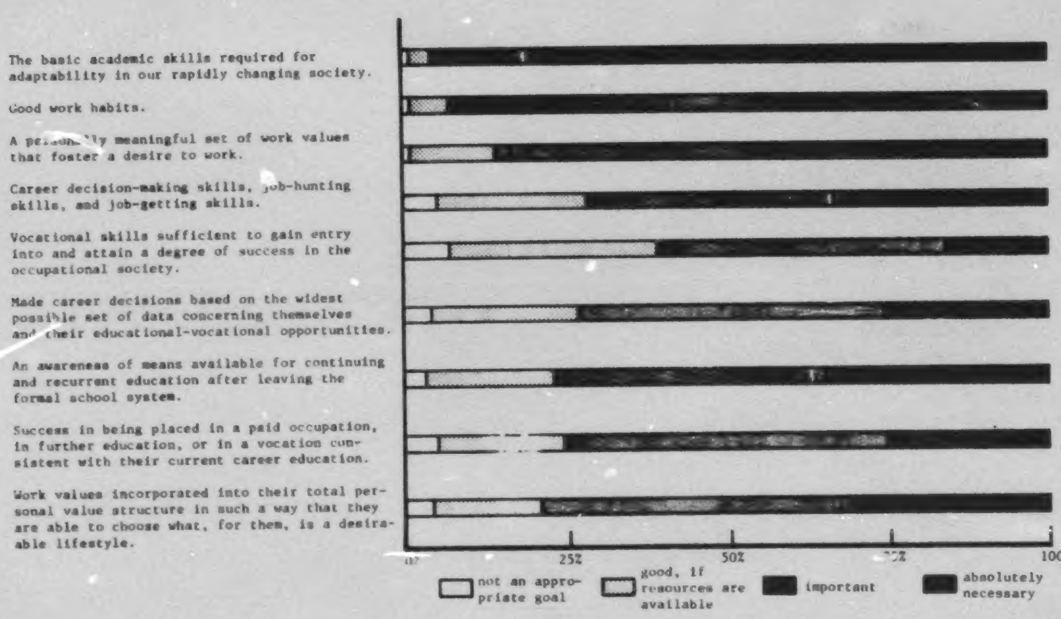

Figure 5.1. Frequencies of ratings of the importance of student outcomes for career education.

An analysis of course structure and methods vis-à-vis the character of institutional position and involvement in career education revealed that institutions with a formal position on career education were more likely than others to offer career education in the form of courses in various departments rather than as a subtopic in other courses. Also, 12% of the institutions with formal career education positions offered career education degree programs, while only 4% of the institutions without a formal position did so.

Inspecting these data with special reference to instructional methods indicated that substantially more of the institutions with a formal career education position tended to use field and community-oriented methods (e.g., guest speakers, work experience, field trips, community work) than did those institutions without a formal position. In-school methods predominated in a substantially larger proportion of these latter institutions.

Approximately one-half of the participating institutions provided data on the certification and service levels of education personnel for whom they made career education available in 1974-75. Table 5.5 presents the proportions of these institutions in each category.

Table 5.5

Percentages of Schools of Education Offering Career Education for Education Personnel as a Function of Certification and Service Level

	Service Level				
Certification level	Kindergarten & preschool	Elementary	Middle school	Secondary	Post-secondary
Preservice	33	68	50	68	21
Inservice: Recertification	17	34	29	37	17
Inservice: Specialization	10	23	25	30	16

Inspection of Table 5.5 reveals that two-thirds of responding institutions offered career education for preservice elementary and secondary education personnel, and half offered career education for preservice middle school personnel.* These statistics suggest that a substantially larger proportion of responding institutions had preservice career education involvement than inservice career education offerings. Fewer than 40% of the responding institutions indicated inservice career education offerings.

Most prevalent among inservice offerings were activities for elementary and secondary personnel recertification (34% and 37% respectively) and for secondary personnel specialization (30%). Regardless of certification level, offerings for pre-elementary and postsecondary education personnel were least prevalent, although one-third of the responding institutions reported preservice offerings for pre-elementary personnel. In both recertification and specialization categories of inservice offerings, somewhat more than one-quarter of the responding institutions offered career education for inservice middle school personnel.

The relatively low ptoportions at the postsecondary service level are explained in part by the relatively few institutions of higher education that offer education personnel development programs specifically for postsecondary personnel, while the low proportions at the pre-elementary service level may be related to the nature of kindergarten and preschool curricula,which tend to emphasize other than career education outcomes.

To obtain some detail in the data on career education for specialists in education, institutions were asked to report the specialties for which career education programs or activities were being conducted, both in 1974-75 and 1975-76. Of the 630 survey participants, 352 (56%) indicated one or more specialties.

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*Preservice education personnel preparation specifically for the middle school was not as common as training for elementary and secondary personnel. This may account for the somewhat lower proportions of institutions offering career education-specific preservice programs for middle school personnel.

As can be seen in Table 5.6, substantial amounts of activity were being directed toward guidance and counseling personnel, specialists in mentally handicapped children, subject matter specialists, and administrators and supervisors.

Table 5.6

Numbers of Schools of Education Conducting Career Education Programs or Activities for Various Education Specialists

Education Specialists	Academic Year 1974-75	Academic Year 1975-76	Education Specialists	Academic Year 1974-75	Academic Year 1975-76
Career education specialists	54	64	Physically handicapped children specialists	55	69
Vocational education specialists	70	79	Mentally handicapped children specialists	89	112
Guidance/counseling personnel	212	223	Gifted or talented children specialists	24	39
School librarians	35	45	Ethnic/cultural specialists	27	30
Curriculum development specialists	65	83	Administrators/ supervisors	97	108
Subject matter specialists	118	128	Other	30	32

Table 5.6 also shows that the net number of institutions offering career education programs or activities increased from the 1974-75 to the 1975-76 academic year for each category of specialization. Separating out those institutions that reported offering programs in both years (the "stable" institutions), the field that the highest number of institutions dropped was guidance and counseling (15 institutions had such a program in 1974-75 but not in 1975-76), and the field in which the highest number of institutions added a specialty was mentally handicapped children (33 institutions did not have such a program in 1974-75 but do in 1975-76). The numbers of stable and changing institutions for each education specialty appear in Table 5.7. When viewed in terms of institution type, dropping or adding career education programs for education specialists does not seem to be related to institution type.

Table 5.7

Changes in the Numbers of Schools of Education
Conducting Career Education Programs or Activities
for Various Education Specialists

Education Specialists	Number offering in 1974-75 but not in 1975-76	Number offering in 1975-76 but not in 1974-75	Number offering in both 1974-75 and 1975-76
Career education specialists	4	14	50
Vocational education specialists	6	15	64
Guidance/counseling personnel	15	26	197
School librarians	4	14	31
Curriculum development specialists	5	23	60
Subject matter specialists	10	20	108
Physcially handicapped children specialists	7	21	48
Mentally handicapped children specialists	10	33	79
Gifted or talented children specialists	2	17	22
Ethnic/cultural specialists	6	9	21
Administrators/supervisors	12	23	85
Other	5	7	25

Responding institutions checked the kinds of activities that they employed to foster the concept of career education among the school of education faculty. Data from 562 institutions (89% of survey participants) indicated that in 283 (50%) of them the "faculty is on its own with respect to career education," and in 70 (13%) of them "nothing is being done," with a somewhat larger proportion of private institutions responding in this way.

On the other hand, 221 (39%) of responding institutions viewed professional association meetings as helpful; 180 (32%) employed faculty seminars and symposia; 202 (36%), visits to career education programs in local schools; and 111 (20%), visits to business, labor, and government agencies. Work experience other than teaching was identified as being helpful in fostering career education at 81 (14%) of the responding institutions, and 26 (5%) were providing sabbaticals for career education-related projects.

In addition to ways in which career education was being fostered among faculty, data about the kinds of support that schools of education were providing career education in local public schools indicated that, among the 558 institutions (89% of survey participants) responding, 216 (39%) provided no career education-specific support to local public schools. Substantially larger proportions of public institutions provided some career education support to public schools (76% of the public institutions as compared with 52% of the private institutions). The predominant modes among institutions that did provide such support were: career education consulting (187, or 34% of responding institutions); inservice teacher training (176, or 32%) assistance in career education curriculum development (151, or 22%); summer workshops in career education (145, or 26%); and summer courses in career education (149, or 27%). These emphases were consistent across institution types for the first three modes mentioned; summer workshops and courses predominated only in the public institutions. In addition, a career education materials center was maintained by 82 (15%) of responding institutions, and 85 (15%) conducted evaluations of career education programs in schools.

The extent of involvement in career education was further characterized by research and development activities in this field. Of the 630 survey participants, 190 (30%) reported research and development work in graduate education programs and faculty projects for the 1974-75 and 1975-76 academic years. Forty-eight responding institutions reported master's degree level activities for 1974-75, and 46 for 1975-76; and 120 reported faculty projects for 1974-75, and 141 for 1975-76.

Funds for the support of research, development, and demonstration activities in career education were reported as being available from USOE in 63 (14%) of 453 responding institutions; from NIE in 6 (1%) of 401 responding institutions; and from "other" sources in 109 (26%) of

418 responding institutions. NIE research, development, and dissemination funds went to one private and five public institutions; USOE funds to 12 private and 51 public institutions; "other" funds to 26 private and 83 public institutions. More than one-half of these "other" sources were State agencies including State education agencies and State Boards of vocational education. At the Federal level, the National Science Foundation and the National Institutes of Health were each cited once, and the U.S. Department of Labor three times. Among nongovernmental sources, the National Alliance of Businessmen was the most frequently identified source, with 9 institutions receiving research and development or demonstration funds from them. General Electric Company, Mobil Oil Company, and "an insurance company" were each mentioned once. Among the foundations, Kellogg and Lilly were each identified twice. Twelve responding institutions provided "local" support for their career education R&D activities, and local public schools were doing so for two of the respondents.

5.5 *What factors have contributed to the success of career educator training programs, and what problems have been salient in these programs?*

Respondents registered their opinions on the effect of various factors in 1974-75 on: (a) the success of career education, and (b) the difficulty in implementing career education programs. The data, appearing in Table 5.8, suggest that certain factors were felt to have the greatest effect, whether viewed positively as "success factors" or negatively as "difficulty factors" (constraints). Support by school of education faculty and by school of education administrators are the most frequently cited success factors, and lack of trained and/or interested staff the most frequently cited difficulty factor.

Among the 393 institutions that stated opinions on success factors, and among the 453 that did so regarding difficulties, the role of the State education agency was felt to be a supportive factor by 50% and a nonsupportive one by 29%. Assistance of Federal agencies

Table 5.8

Percentages of Schools of Education Identifying Various Success and Difficulty Factors in Implementing Career Education Personnel Development Programs

Factors Contributing to Success	Percent of Schools of Education (n=393)	Factors Contributing to Difficulty	Percent of Schools of Education (n=453)
Support of school of education faculty	78%	Lack of trained staff	72%
Support of the business/labor/industry/government communities	43%	Lack of interest on the part of the faculty	72%
Availability of funds	38%	Lack of funds to train staff	74%
Availability of curriculum materials for college students	55%	Lack of funds to purchase materials	72%
Assistance from State education agency	50%	Confusion between career education and vocational studies	55%
Assistance from Federal agencies	24%	Lack of interest on the part of the State education agency	29%
Support of school of education administrators	69%	Lack of interest on the part of the business/labor/industry/government community	28%

was cited as a supportive factor for career education personnel development among only 24% of the respondents. Interestingly, staff supports for career education was listed as contributing to success in 78% of the schools of education and as a difficulty in 72% of the schools. The implication is that within many schools of education there are both supporters and dissenters with respect to career education.

5.6 Summary and Implications

The need for staff development and the lack of competent persons to train the staff were among the most important problems for implementation of career education, according to the respondents to the nationwide survey of local school districts. The fulfillment of that need, especially through preservice training program support, was rated by the State education agencies as the most important area for Federal leadership and support. Thus the role of institutions of higher education, through teacher training programs, is viewed by career education practitioners around the country as very important if the career education movement is to achieve permanence at the K-12 level. A survey was therefore carried out to assess the fulfillment of that role by the nation's teacher training institutions.

Data from 630 member institutions of the AACTE yielded information on various aspects of teacher education for career education during the 1974-75 and 1975-76 academic years. Results are reported in terms of program activities, funding data, success factors, and respondents' opinions regarding the role of teacher education relative to career education-related pupil outcomes.

According to the respondents, career education is being actively discussed in most schools of education in all sectors of higher education. However, the adoption of its several objectives is still being evaluated, and its pervasiveness is in a state of flux. Only 10% of the institutions have developed a formal policy, and the types of program offerings are changing from year to year. In half the institutions the faculty was "on its own" with respect to career education.

With few exceptions, schools of education were allocating less than 7% of their teacher training budgets to career education, in both 1974-75 and 1975-76; the funds for career education instructional activities, while coming from many sources, were most frequently State program funds. Ten percent fewer schools of education; however, were expecting to receive State program funds in 1975-76 than in 1974-75.

The priorities of (K-12) student outcomes as viewed by schools of education were in complete accord with the priorities viewed by respondents to the local school district survey. In both cases, the emphasis is in the area of improvement of education overall (highest priority: assuring competency in basic skills); and less emphasis is placed on specific career development stages (lowest priorities: equipping students with skills for occupational entry and success, and placing students in a paid occupation or in further education).

The modes and methods of activity in career education training tend primarily to be the traditional methods for training teachers; and career education has so far been treated as a subtopic in courses not primarily designed specifically for career education. These results suggest that career education has, so far, not had a great deal of impact on the programs of schools of education. These schools of education view the promotion of good general education as their primary objective, and career education will be accepted to the extent that it fits within that framework.

CHAPTER 6

The Status of Career Education as Reflected in Instructional and Reference Materials

6.1 Methodology

Review of past assessments of career education materials. In both 1972 and 1974, Peat, Marwick, Mitchell & Co. conducted a survey of career education materials for USOE. The first of these searches was designed to locate, screen, and assess commercially produced career education materials and develop a bibliography for use by local education agencies. Of the thousands of units reviewed in that survey, 2,000 produced between 1965 and 1972 were judged to be applicable to the objectives established by the Comprehensive Career Education Model I (CCEM). Quantitative classifications were made by grade level, type of material (e.g., printed, audiovisual), cost, instructional strategy required, target population, and discipline or content area. Qualitative judgments were made concerning the appropriateness to seven CCEM elements, the applicability to thirteen designated target areas, and the suitability to CCEM needs. Abstracts of each positively assessed material were placed in the ERIC retrieval system.

In 1974, Peat, Marwick, Mitchell & Co. requested materials from many noncommercial sources and screened them against criteria established by project staff. Only printed, instructional, noncopyrighted materials were assessed. An evaluation instrument was devised to assess the materials. Quantitative information was gathered within the categories described in the 1972 commercial search. Materials were then assessed qualitatively on such dimensions as content bias, adequacy and consistency, and versatility. Some materials were removed from the assessment process at certain criterion points, and the remainder were assigned a numerical rating. A bibliography was produced, indicating either exit points or qualitative scores for each of 624 units. Copies of the findings and results were sent to seven State technical education curriculum laboratories for dissemination.

In 1975, the Educational Products Information Exchange Institute (EPIE) conducted a third study of career education materials, this time for the National Institute of Education. This study collected both commercial and noncommercial materials produced since 1971. Materials were listed in a bibliography that included information on grade level, target audience, career stage, cost, presence of evaluation, presence of objectives, suggested methods and activities, and a brief content abstract. Included in the EPIE report were chapters on racism and sexism in career education materials and a chapter designed for use by teachers and administrators on selecting and evaluating career education materials.

Collecting commercial materials. The staff of the present project sent letters to 136 commercial publishers of career education materials, requesting materials listed in the EPIE Career Education S*E*T* as well as any materials produced since the EPIE cutoff date (January 1975) and deemed to be career education materials. These publishers were selected because they either sent materials to EPIE for their compendium or were recommended by experts on the project staff. The responding publishers sent a total of 561 materials of which 27 were screened out because they failed to meet one or more of the following criteria:*

1. Material is in the public domain;
2. Material was published since 1971;
3. Materials was designed primarily for use by students, teachers, program planners, parents, or local community members;
4. Material was not designed exclusively for vocational education (i.e., "how-to" manuals);
5. Material addressed one or more of the career education goals (career awareness, self-awareness, career exploration, career decision-making, and career entry).

The remaining materials were cataloged and evaluated.

Materials recommended by a member of the National Advisory Council on Career Education. In December 1975 a list of commercial publishers compiled by staff members at Southern Illinois University was offered to the project. A cross-check of the materials listed revealed that the SIU list included several hundred items that were either not requested or not received by project staff. Letters were consequently sent to 120 publishers requesting the additional materials. The staff received 219 materials, screened out 79 due to pre-1971 publication dates, and cataloged and evaluated the remainder.

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*A sample screening form is part of Appendix E.

Collecting noncommercial materials. Using the EPIE list of noncommercial publishers and a list of persons who attended the 1974 mini-conferences sponsored by USOE, the project staff sent over 400 letters requesting noncommercial materials; 377 materials were received from these sources.

To locate items listed in ERIC, the staff contacted the ERIC Clearinghouse on Career Education, located at Northern Illinois University, to obtain descriptors used by EPIE for their ERIC search. Further, they talked with the National Center for Occupational Education at North Carolina State University and the Ohio State University Center for Vocational and Technical Education. An AIM/ARM search was conducted in late July 1975. Of the 500 items listed, only 22 were classified as "career education materials." The other 478 materials were either final reports, theses, or annual reports and were screened out using the criteria listed above. The staff then wrote to producers, requesting the materials located as a result of the ERIC search that were produced after the EPIE cutoff date of December 1974. Of the 22 materials requested, the staff received 10. Finally, the project staff sorted and cataloged the collection of approximately 2,000 materials in the USOE Career Education library.

6.2 Cataloging Materials

All noncommercial materials were cataloged using the USOE catalog form. Commercial materials were cataloged on an adapted version of this form (the Product Profile form), which differs from the USOE form only in that the descriptive categories "cost of material" and "target population" have been added. Copies of both forms can be found in Appendix E. To supplement the handbook developed by the Office of Career Education, "Guide to the Cataloging of Materials for the Office of Career Education Library," the project staff assigned to catalog noncommercial materials in the USOE library produced a document that defined all areas of the form not specifically delineated in the USOE handbook (see Appendix E).

To place in perspective the results of data analysis discussed later in this chapter, it is important to understand the nature of the catalog form and the cataloging process. The two main criteria for determining how a material was to be categorized were:

1. the extent to which a particular quality was present in the material, and
2. the likelihood that the material would be accessed for that particular quality.

Classification on the USOE catalog form reflected the overall content of the material. Multiple entries could be made within content areas. For example, a material would be classified both as an administrative guide and as a curriculum guide if both qualities were present and if the material was likely to be accessed by both administrators and teachers.

Each material was classified on the basis of several brief examinations, which took into account its purpose, content, and organization. The first examination yielded the appropriate grade level, the type of material, and any special groups for which the material might have been designed. Secondary examination revealed the organization of the material into specific content areas and career clusters. Categories were checked when the contents of the material fell clearly into specific areas; when a firm decision could not be made for selected categories due to the broad nature or ambiguity of the material, none of these categories was marked. Further examination allowed finer classifications to be made regarding the content of the material and the goals of career education to which the material was addressed.

6.3 Evaluating Materials

In order to evaluate the quality of the career education curriculum materials developed since the 1972 and 1974 Peat, Marwick, Mitchell & Co. studies, the staff developed a 4-page assessment document using as a model the 21-page document developed in 1974 by Peat, Marwick, Mitchell & Co. The Peat, Marwick, Mitchell & Co. assessor's manual to accompany their assessment instrument was not available publicly, nor were the project staff successful in obtaining it.

A trial pretest was conducted by staff using the instrument developed by Peat, Marwick, Mitchell & Co. Interrater reliability was unsatisfactory due to ambiguity in wording and lack of specific criteria for the meaning of scale values; therefore, using the instrument in its original form was judged to be infeasible. The staff, consequently, produced a 4-page instrument that eliminated redundant items and ambiguous wording within items but that followed the perceived intent of the original instrument as closely as possible. In addition to clarifying items and substantially shortening the original instrument, the staff separated from the evaluation instrument those sections that were redundant with content areas addressed by the USOE catalog form. The newly developed instrument was tested by staff to obtain time estimates and to determine interrater reliability. The raters reviewed areas of discrepancy and refined criteria. A second test of the instrument indicated that satisfactory interrater reliability had been achieved. In conjunction with instrument development, the staff produced an "Assessor's Manual" that defined terms and established criterion statements for determining the appropriate response to each item.

The final assessment instrument contained 27 items organized into six sections. These sections were (1) research data information, (2) content bias, (3) adequacy and consistency, (4) learner performance evaluation, (5) versatility, and (6) user support components. Copies of the evaluation instrument, containing frequency distributions for commercial and noncommercial materials, and the "Assessor's Handbook" are included in Appendix E.

Using the revised evaluation form, two staff members reviewed all the commercial materials, each looking at about half of the materials, with reliability checks on every 50th material. Table 6.1 contains the reliability coefficients. The reliability achieved for the adequacy and consistency ratings and the learner performance evaluation ratings were low due to the extreme restriction of range on those dimensions; the commercial materials almost universally received minimum ratings on these dimensions.

The number of commercial materials evaluated included 154 films and silent filmstrips, 258 printed materials, 251 audiovisual materials (primarily filmstrips with audio cassettes), and 6 manipulative materials. (More materials were cataloged than were evaluated since some of those

Table 6.1

Interrater Reliability Coefficients From the Evaluation of Career Education Materials

Section of Assessment Instrument	Reliability Coefficient
1.0 Research Data Information	r = 1.00
2.0 Content Bias	r = .90
3.0 Adequacy and Consistency	r = .35
4.0 Learner Performance Evaluation	r = .41
5.0 Versatility	r = .84
6.0 User Support Components	r = .80
Total Over All Evaluations	r = .67

cataloged on the basis of information provided by the EPIE compendium were never received.) The staff members also evaluated a random sample of 90 printed noncommercial materials.

All cataloging and evaluating information was entered into computer files for analysis and for the production of an indexed bibliography of available career education materials (see Appendix E).

6.4 Cataloging Results

During the course of this study, a total of 797 commercial and 2193 noncommercial career education materials were cataloged according to forms and directions contained in Appendix E. The following discussion of the analyses of cataloging data indicates differences and similarities between materials developed by commercial and noncommercial producers while describing the nature, content, and intent of those materials.

Figure 6.1 indicates the number of times a certain population was marked as the intended user of the material. As indicated in the previous section, more than one category could be marked for any one material. For example, a set of student workbooks accompanied by a teacher's guide would be marked both "students" and "teachers." The percentages indicated in Figure 6.1 are therefore based on the total number of classifications in a content area.

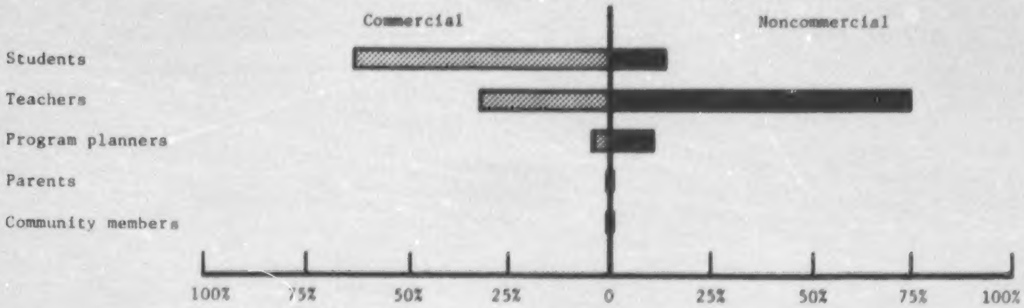

Figure 6.1. Populations for which commercially and noncommercially produced career education materials are applicable.

Students were the primary intended users of commercial materials. The substantial figure for "teachers" represents not only materials that were primarily addressed to teachers but also student-directed materials that contained accompanying teacher guides. Program planners (administrators, guidance personnel, educational personnel) were rarely targeted as the intended users of commercial materials. Materials targeted towards either parents or community members were exceedingly rare. It appears that publishers newly acquainted with the career education needs of educators and students have yet to develop materials to meet the needs of parents and community members or to enhance their potential for contributing to this educational process.

Although materials intended for the various populations received similar ratings in the evaluation process, teacher-targeted materials scored slightly higher than average in including positive references to ethnic minorities. The average score on this dimension over all materials indicated either neutral references or a few positive references to ethnic minorities; many materials were ethnically biased.

Materials targeted for program planners scored better than average in both ethnic and sex bias. The average score on both dimensions was quite low, that is, many materials contained at least a few instances of bias.

Those materials targeted towards program planners and categorized as "instructional" also scored higher than average on presence of clearly and specifically stated objectives and on content adequate for achieving those objectives.

According to the survey of local school districts, noncommercial materials were produced for the most part by teachers. The local production of these materials also had benefits as a staff development activity. Such production was highly correlated with overall career education activity level in a district. Noncommercial materials that were cataloged were usually targeted toward teachers. Unlike commercial materials, which required little preparation or interpretation by teachers and which were designed for immediate (and often unassisted) use by students, noncommercial materials were designed to be adapted, interpreted, supplemented, and disseminated by the teacher for use in his/her particular classroom.

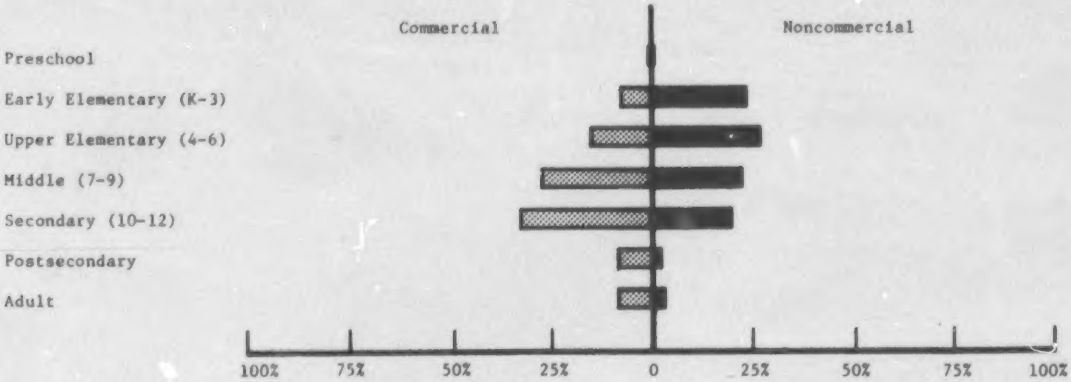

Figure 6.2. Educational levels for which commercially and noncommercially produced career education materials are applicable.

The results displayed in Figure 6.2 indicate that noncommercial producers were developing materials for those persons with whom they were most concerned--K-12 students. Beyond this, however, the results indicate that materials were being developed for all grade levels in approximately equal proportions. That is, there were just as many career education materials for elementary students as for junior and senior high students--a finding that shows the growing acceptance within school districts of the concept that "career education" is for all age levels.

A somewhat different picture was found for commercial materials. The number of materials available for use by students increased with grade level and predominated at the upper level. Elementary level materials, however, scored above average on the evaluation categories of "presence of clear and specific objectives" and "extent to which optional instructional strategies are provided."

There are several possible explanations for this difference between commercial and noncommercial materials. Local materials production may be funded through government grants; that is, those governmental agencies that support the concept of "career education" at all grade levels might be supplying the money to school districts for development of materials to implement this concept. On the other hand, funds to buy commercially produced materials are limited and must be allocated to areas where they will have the most impact. It is likely that many administrators, faced with limited budgets, would authorize more money to buy or rent commercial materials for the upper grade levels than for the lower grade levels, believing that the materials would have greater impact on students who are about to enter the world of work.

A second difference between commercial and noncommercial materials reflected in Figure 6.2 may in part be an artifact of the cataloging procedure. The graph indicates that substantially more materials were produced by commercial publishers for postsecondary and adult audiences than by noncommercial producers. However, while a noncommercial material would, in most instances, state the intended grade level population of the material and would be cataloged accordingly, many commercial materials did not state intended grade level, and consequently the cataloger was required to make a judgment as to the appropriate audience. Many materials deemed appropriate for senior level students could also be used successfully with older students and adults and were consequently marked for all three categories. Such a material, were it noncommercially produced, would probably specify "senior students" as the appropriate audience and only one category would have been marked.

Nonetheless, the fact remains that materials were not being developed to any great extent for postsecondary and adult audiences. Given that career education should span the lifetime of an individual, it is important that persons have materials available to them after they leave the K-12 public education system.

The catalog area "type of material" reflected the same differences between noncommercial and commerical materials discussed previously in relation to target population. Commercial materials were for the most part texts, student workbooks, teacher's guides (which normally accompanied student materials), and films and audiovisual materials--all of which were designed for unmodified use by students. The largest noncommercial cate-

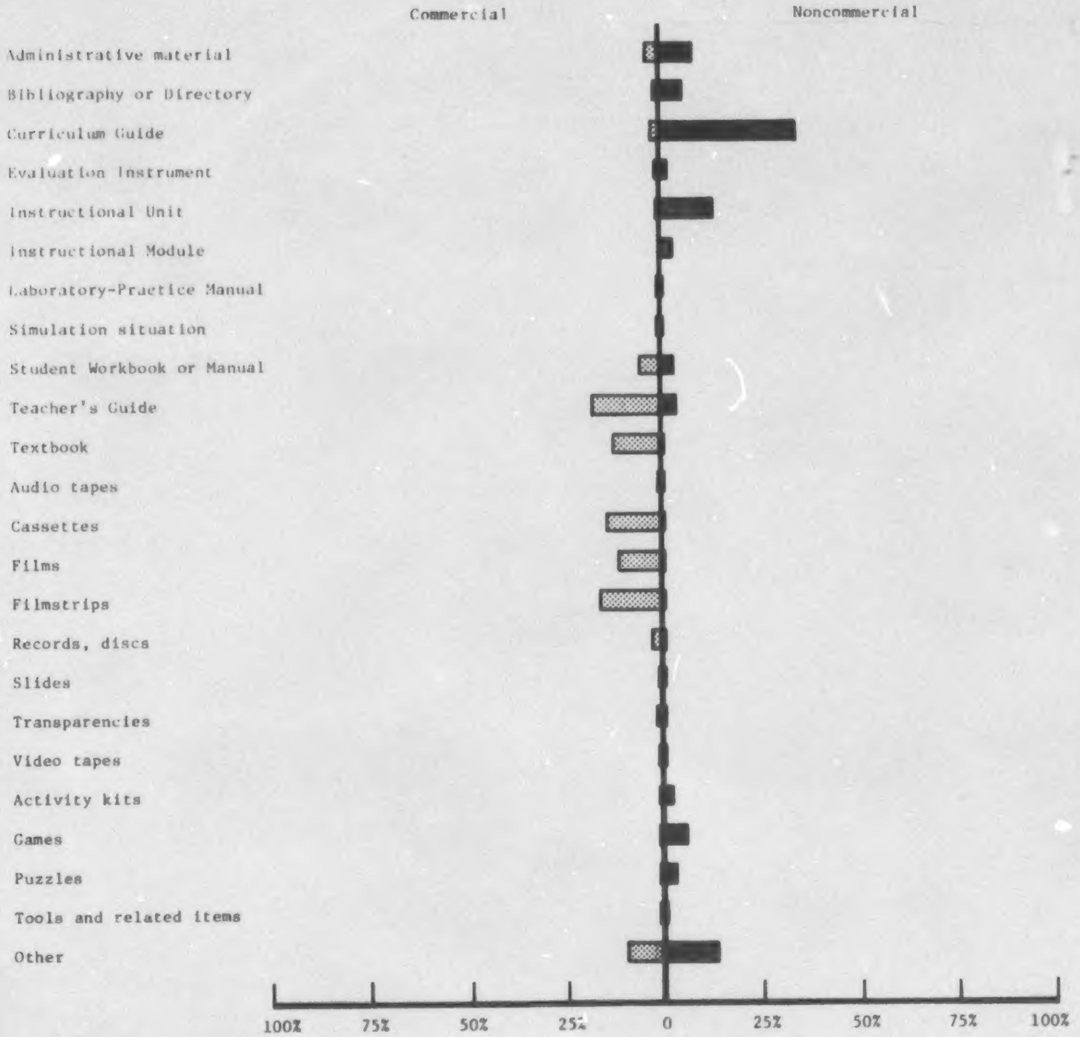

Figure 6.3. Percentages of different types of commercial and noncommercial career education materials.

gory was curriculum guide, which included characteristically detailed, specific curriculum plans and suggested teaching strategies, lesson plans, and activities. Instructional units, which were similar in content but less detailed than curriculum guides, comprised another large category. Both of these types of materials were designed for teacher use.

An additional difference between commercial and noncommercial materials is illustrated by Figure 6.3. A large percentage of the film and audiovisual materials, produced by commercial publishers and constituting over half of all commercial materials, could be defined as noninstructional, supplementary materials. In addition, a large number of materials marked "other" were noninstructional resource materials (characteristically books describing a career cluster or specific occupation, which would be found usually in the library, career education center, or counselor's office) that were directed toward students. A much smaller percentage of these types of materials were produced noncommercially. Thus, while the majority of noncommercial materials were designed to infuse career education into the standard curriculum, a large percentage of commercial materials could be described as supplementary to the standard curriculum.

Commercially produced student workbooks were less biased with respect to race and sex than the average material. Curriculum guides scored above average in several categories--objectives, instructional strategies, individualized instructional methods, and provisions for using the material in a more comprehensive education program. Films scored below average on race and sex bias (were more biased with respect to race and sex) but above average in the areas of objectives and learner performance evaluation.

Few materials were designed for use with special populations. Of the 797 commercial materials cataloged, materials were categorized as being intended for special populations only 88 times. Since any one material could be targeted for several special populations, this represented less than 10% of the total number of materials. The remaining materials did not always ignore special populations of ethnics, females, and so on, but these other materials gave no more than minimal attention to these populations. Figure 6.4 illustrates the intended users of those commercial materials checked as applicable for use with or by members of special populations.

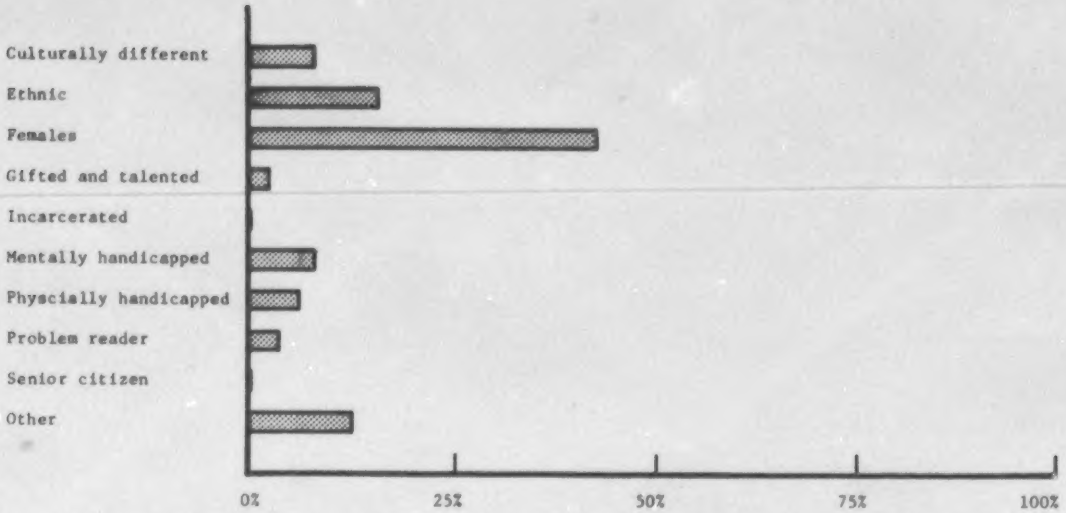

Figure 6.4. Special populations for which commercially produced career education materials are applicable. (Note that percentages are of those targeted to some special population, not of all materials.)

Of those materials that were targeted for special populations, the category of "females" dominated all others. These materials explored the changing work roles of women and discussed the problems of sex-role stereotyping.

Although mentally and physically handicapped received much less attention, the figures displayed are not representative of all available materials; the category "other" was marked for materials that specified "special education" students as their target population, and therefore a few materials for mentally and physically handicapped would also be found there. It should be remembered that these figures represent only 23 materials--certainly a very low figure in light of the great variety of needs that these students have for career education materials. Materials targeted towards special populations of racial or ethnic minorities scored below average on both presence of objectives and learner performance evaluation. Other special population-targeted materials tended to receive average scores.

The total lack of materials for the incarcerated and for senior citizens is consistent with the finding that most materials were designed for K-12 students. Nevertheless, the dearth of materials for these populations (as well as for the handicapped) points up a severe need in commercial materials development.

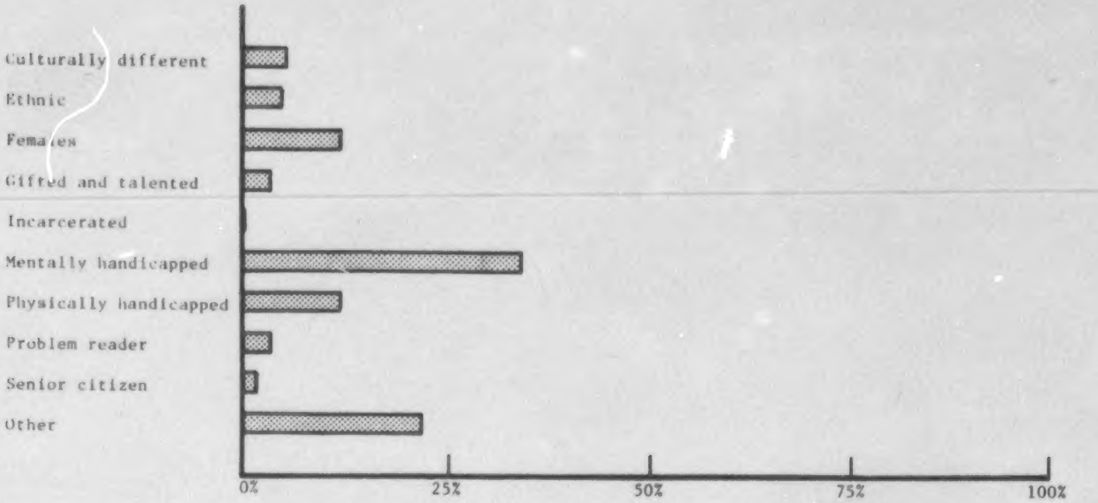

Figure 6.5. Special populations for which noncommercially produced career education materials are applicable. (Note that percentages are of those targeted to some special population, not of all materials.)

Figure 6.5 illustrates the same lack of attention paid to special groups by producers of noncommercial materials. Materials were categorized as intended for special populations only 104 times from a total of 2,193 materials. The most frequent targets were the special populations of the mentally and physically handicapped. These figures are somewhat inflated, however, due to the cataloging procedure. Categories of mentally and physically handicapped as well as "other" were marked for materials designated as "special education materials." A maximum of 12 materials qualified for any of the remaining categories--a very small number in relation to the larger number of materials cataloged.

At each grade level, a large percentage of materials was directed toward multiple career goals. Part of this tendency was due to the lack of exclusivity in the definitions of each goal. For instance, a "career exploration" material (i.e., one that gave specific information about careers or career clusters) was also in many cases a "career awareness" material (i.e., it discussed the broad range of available careers in the working world). Of all areas on the catalog form, categorizing on the basis of career goals was a particularly difficult task. Few materials indicated the goal to which they were directed and in most cases the rater was required to evaluate the intent and focus of the material and to determine which category or categories were most applicable. "Career entry" was marked only when materials contained information on specific job-getting skills (e.g., writing a resumé, reading classified ads), and "career advancement" was marked only for materials that were exclusively vocational education materials. The latter were, of course, screened out of the system, and consequently no materials were found in this category. "Career-decision-making" and "self-awareness" were usually more difficult to identify as these aspects of the materials considered were more often not set off or addressed as separate topics. Raters were thus required to search for elements associated with these goals and determine if their presence was sufficiently cogent as to warrant marking of these categories.

Figure 6.6 illustrates the pattern of career goals found within grade levels for commercial materials. At the lower levels, approximately equal numbers of materials fell within the categories of "career awareness" and "career exploration"; at the upper levels, "career exploration" materials far outnumbered all others. This trend would be expected given current theories of career education. While younger students are encouraged to become aware of the world of work, older students are encouraged to explore that world in more detail.

"Self-awareness" was marked approximately as often at both the upper and lower grade levels. Many times this category was marked when an element of a career awareness or career exploration material was devoted to self-awareness activities--activities that help acquaint the student with the uniqueness of his/her own self, the relationship of self to others and society, and individual interests or skills.

Materials devoted to or containing a substantial element related to "career decision-making" were more and more prevalent at the upper grade levels. These materials involved the teaching of both general decision-making skills and decision-making that involves examination of the advantages, disadvantages, and individual potential for specific jobs or careers. This category would be marked if a material focused on the individual choice process and contained a fairly well-defined plan for teaching or learning decision-making skills.

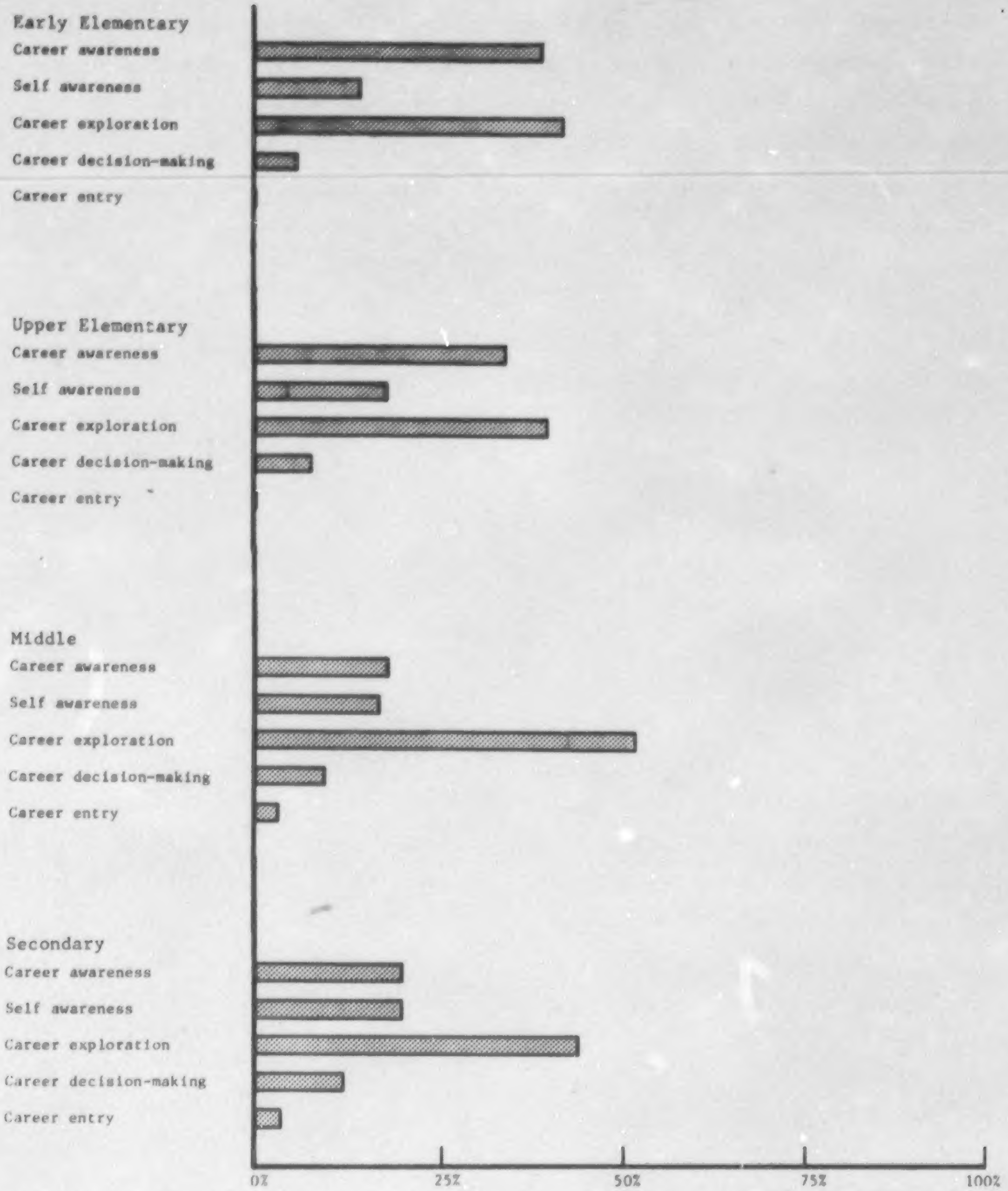

Figure 6.6. Career goals for which commercially produced career education materials are applicable.

"Career entry" materials were rare at all grade levels but, understandably, more numerous at the senior level. It would be expected that materials involving the teaching or learning of specific "job-getting" skills" would be directed towards students who must prepare themselves for impending entrance into the world of work.

In general, the distribution of commerical materials within career goals indicates that these materials were more focused on providing students with information about the general and specific nature of the world of work than providing skills for use in career preparation and decision-making. Figure 6.7 illustrates a pattern very similar to that found in commercial materials for noncommercial materials, with the primary difference that career exploration materials consistently outnumbered all others, even at the lower grade levels, indicating that elementary noncommercial materials tended to be as career-specific as secondary noncommercial materials.

Few commercial materials designated specific disciplines in which the materials could be used. Consistently, catalogers were required to decide on the most appropriate disciplines or content categories from an examination of the material itself. As shown in Figure 6.8, materials focused on the traditional academic areas of English, natural sciences, and social sciences at the lower grade levels. In addition, a fair percentage of materials were categorized as Health and Safety/Physical Education/Recreation (a category that covers occupations involving sports and leisure activities), or as Trade and Industrial Occupations (e.g., plumber, electrician, carpenter). Materials categorized within this discipline received evaluation ratings well below average in the areas of both race and sex bias. At the upper levels, scholastic categories remained frequent, but those categories that deal with major occupational areas predominated--Health Occupations, Home Economics (Food and Clothing Preparation), and Trade and Industrial Occupations.

In general, the number of materials within a category was consistent with the number of occupations related to that category. No materials were found in the areas of Foreign Languages or Safety and Driver Education. Although few materials were categorized within the discipline of mathematics, many occupations that require mathematical skills would have been cataloged within appropriate occupational areas such as Business, Office, or Industrial Arts.

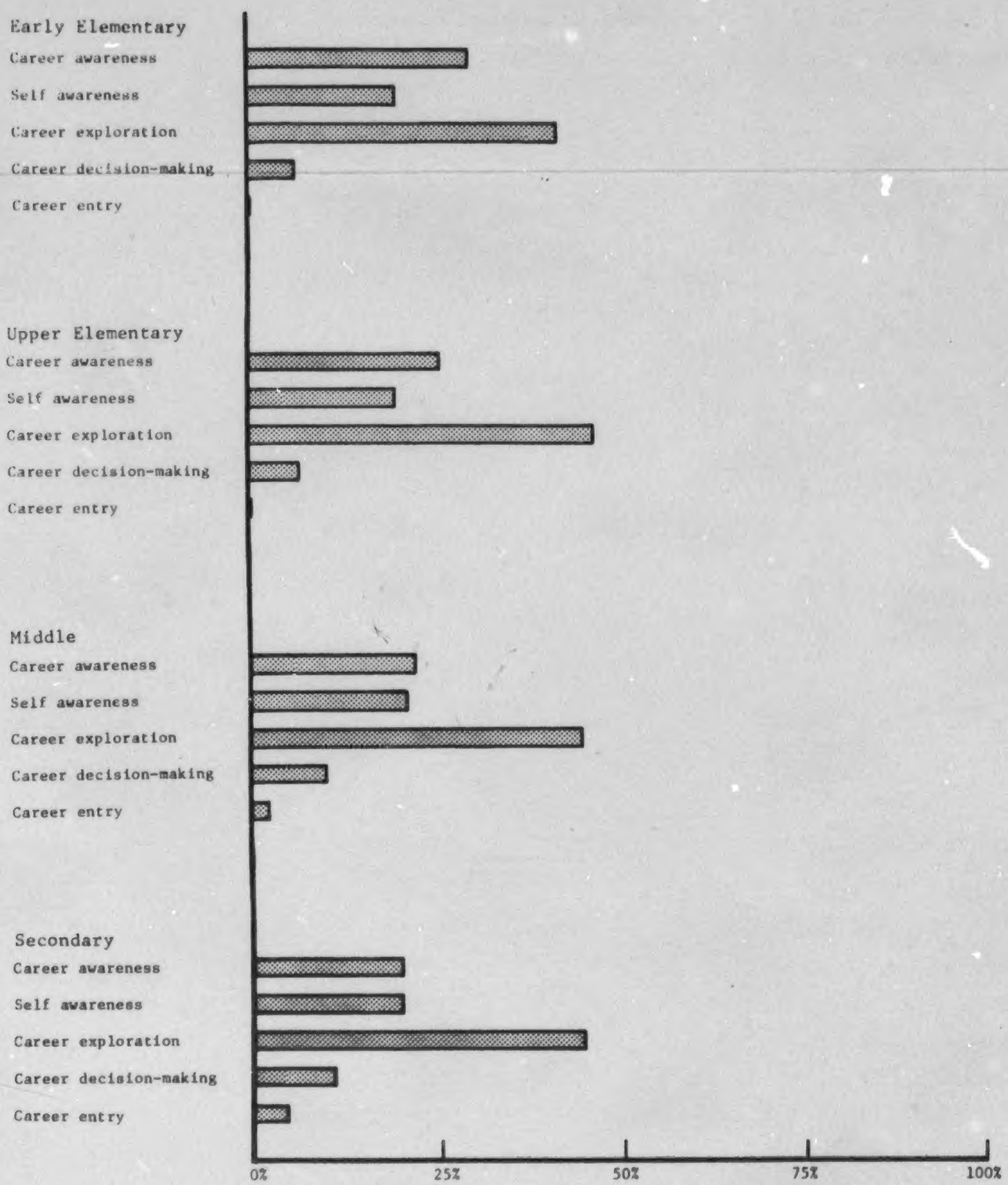

Figure 6.7. Career goals for which noncommercially produced career education materials are applicable.

As shown in Figure 6.9, noncommercial materials at all grade levels designed primarily for use in the major scholastic areas of English, mathematics, natural science, and social science. In many cases, these materials were developed by teachers for use in the discipline they taught and

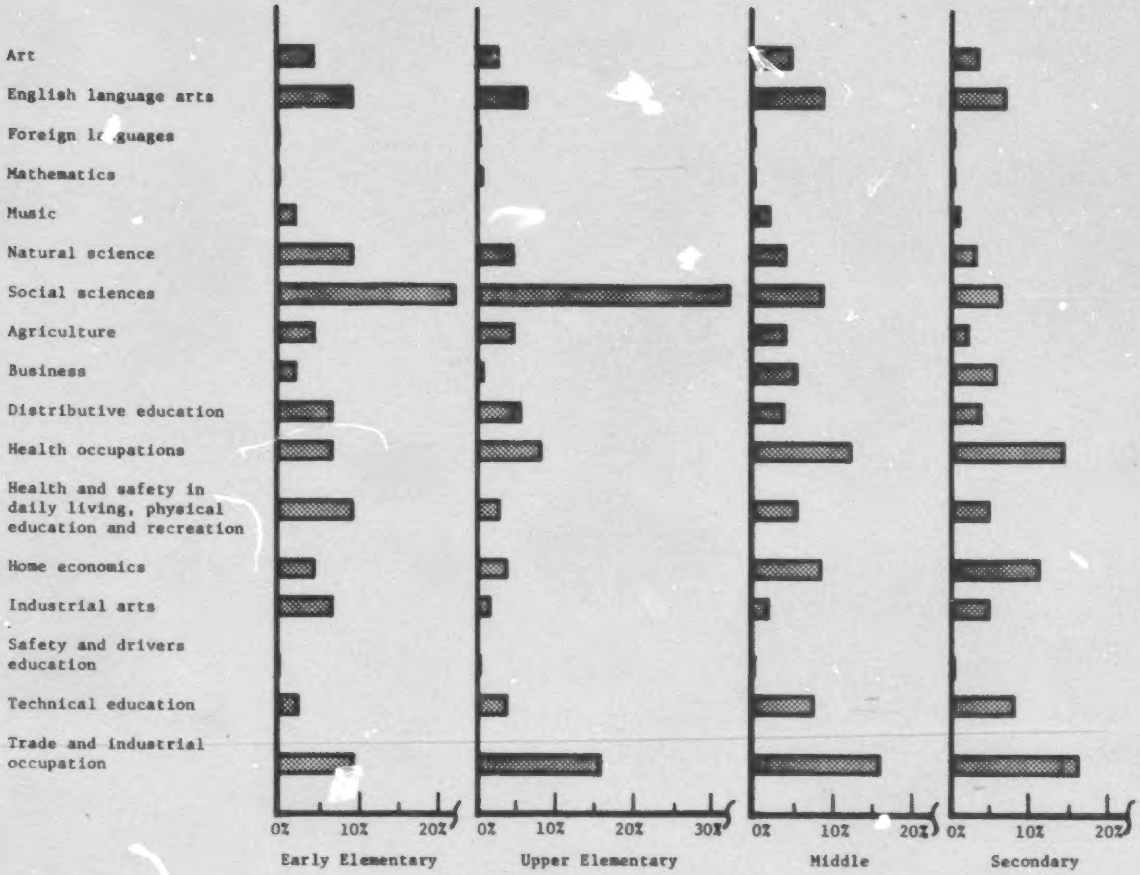

Figure 6.8. Discipline and content areas for which commercially produced career education materials are applicable, by grade level.

were designed to be infused into the standard curriculum. The one substantail difference in the pattern (Home Economics and Industrial Arts) supports this contention; since these disciplines are usually not offered until the upper grade levels, it is understandable that materials categorized within these disciplines would become more numerous at the upper grade levels.

Both commercial and noncommercial materials were approximately equally distributed across career clusters. The clusters that contain few occupations or are geographically dependent (e.g., Marine Science) received the least representation. A substantial percentage of materials covered more than one cluster, while many were categorized as being "oriented around all clusters."

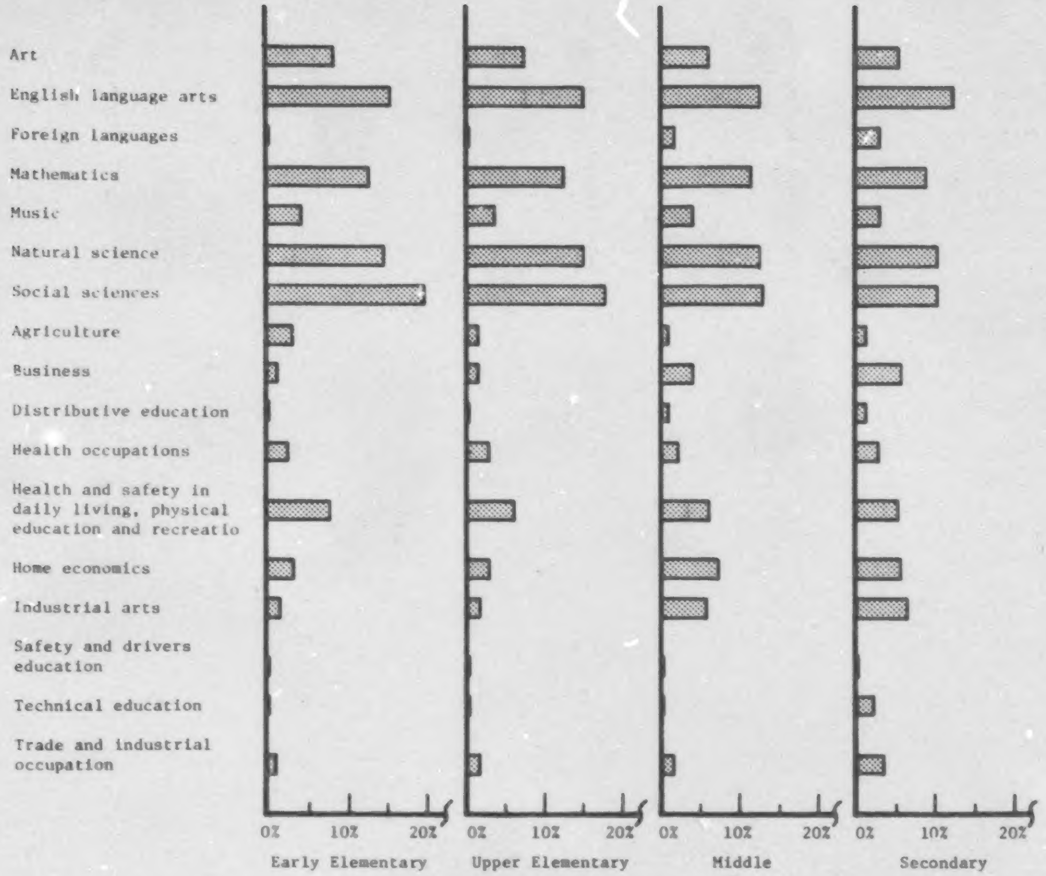

Figure 6.9. Discipline and content areas for which noncommercially produced career education materials are applicable, by grade level.

6.5 Evaluation Results--Commercial Materials

Figure 6.10 shows the frequencies of scores of commercial materials on elected items from the evaluation instrument. (Bar-widths correspond to percentage of materials receiving indicated ratings.) Analyses of the evaluations of 660 commercial materials indicated the following results, which are organized by the six content areas of the evaluation instrument. Results of evaluation related to catalog areas are reported in the preceding section. Distribution of scores can be found in the evaluation instrument in Appendix E.

Presence of research data. The majority of materials (89%) contained no evidence of scientific evaluation; only 1% of the materials contained references to published reports of evaluation.

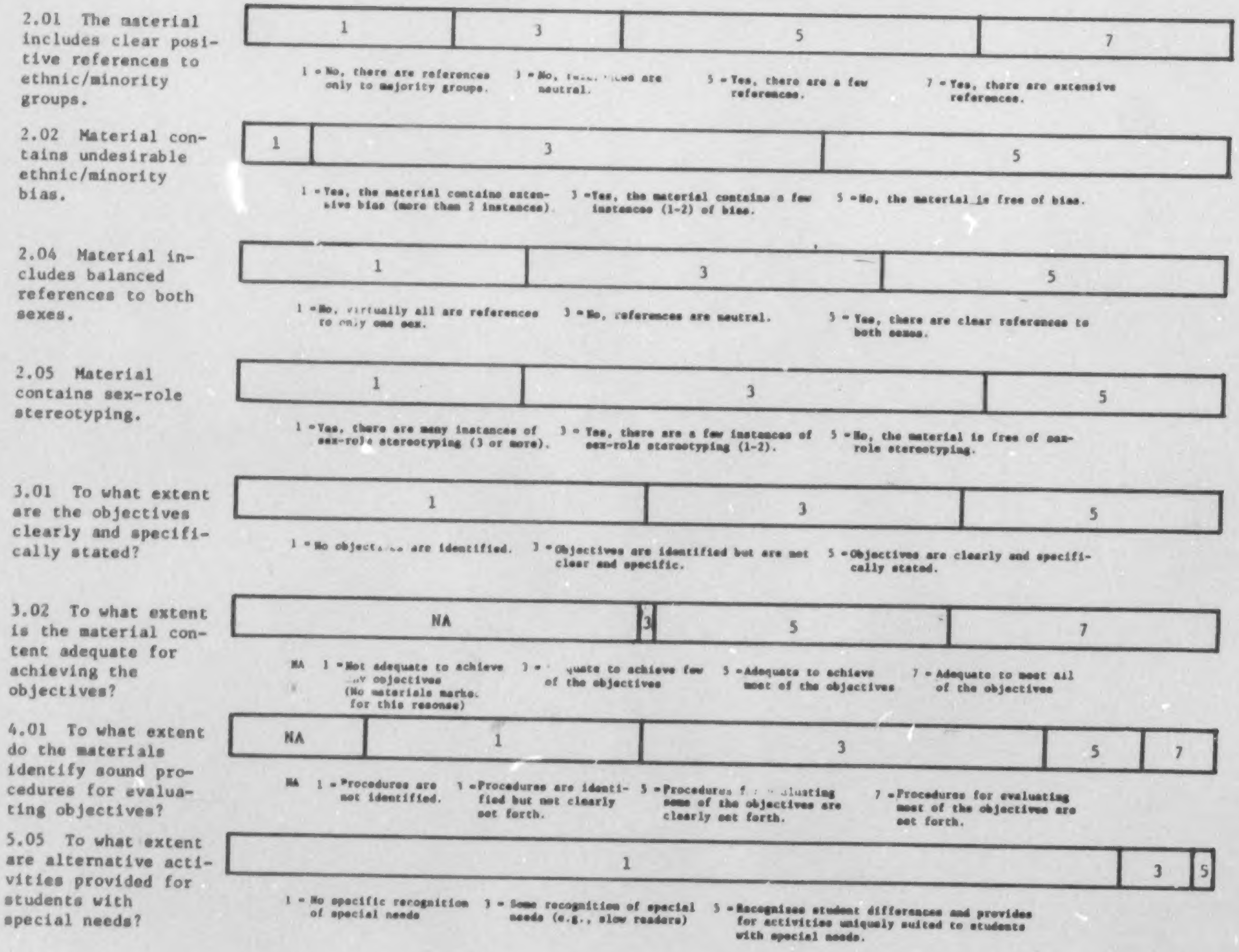

Figure 6.10. Commercial evaluation results on selected items. (Note that only instructional materials were included in calculations for items 3.01, 3.02, 4.01, and 5.05.)

Content bias. Few materials exhibited religious bias or job denigration, but the great majority of materials contained at least some race or sex bias. An example of these kinds of bias is provided by the material evaluated that contained a cartoon drawing of three individuals--a white male, a black male, and a white female, each with a "cloud" above their head within which work goals were illustrated. For the white male the cloud contained stock certificates, for the black male a Cadillac, and for the white female a house! Fifty-one percent of the materials contained a few (one or two) instances of race bias, while 7% contained extensive race bias. The situation was substantially worse with sex bias, 47% reflecting some bias and 29% reflecting extensive bias. The average material contained a few positive references to ethnic minority groups and females, but approximately 25% of all materials made reference only to white males.

Adequacy and consistency. Only 26% of the instructional materials contained clearly and specifically stated objectives. Objectives were identified in an additional 32% of the materials but were not judged to be clear and specific; 42% of the instructional materials contained no objectives at all. Of the materials that did contain objectives, the content was adequate to meet all objectives in only half of the materials. Materials were generally well-organized and well-formated, but only 14% utilized teaching strategies that consistently reflected awareness of sound learning principles.

Learner performance evaluation. Approximately half of the instructional materials contained some provision for learner performance evaluation, but only 28% of these clearly set forth procedures for such evaluation. Materials containing evaluation procedures were usually flexible enough to meet some special user needs, but only rarely were procedures for pretesting or remediation provided.

Versatility. The great majority of instructional materials were judged adaptable to a number of organizational and staffing patterns, while over one-third provided a broad range of optional instructional strategies. Most suggested other media as possible instructional aids, and almost half included individualized instructional methods. Only 2% of the instructional materials provided specifically for the needs of special users, and only

10% contained specific provisions for infusing the material within the education program (30% included such provisions in general terms). Evaluations in this section indicated that 26% of all materials included administrative material as well as resource materials that could be accessed by students.

User support components. In general, materials all scored very highly on usability by targeted groups without prior extensive knowledge or training. Over half of the materials referenced additional resources and provided all necessary background information.

Deficiencies and problems. Mean scores on selected items from the evaluation instrument indicated a few areas of severe problems and a few areas in which substantial improvement was needed.

Scores on four items indicating the presence or absence of positive references to non-majority groups and the number of instances of race and sex bias indicated this area to be one of major concern. Although race bias was found less often than sex bias, both race and sex bias permeate the great majority of materials. Forty-one percent of the materials were judged to be free of race bias and 25% of the materials were judged to be free of sex bias. Although these figures are not small, they are far from the ideal situation in which 100% of the materials would be free of bias.

Fifty-one percent of the respondents from the survey of 900 local school districts indicated that efforts were being made by district staff to remove race bias from materials; 58% responded similarly on the question of sex bias. Forty-four percent of the respondents indicated that race bias was not a problem, while 30% said that sex bias was not a problem. These figures suggest that sex bias is, at this time, a greater problem than race bias and that stronger efforts are needed to reduce the stereotyping that can and does restrict students' occupational aspirations.

As indicated earlier, only one-quarter of the materials contained clear and specific objectives, and the material content was adequate to meet objectives only half of the time. Furthermore, of those materials that contained objectives, only one-fourth clearly indicated procedures for evaluating students' attainment of those objectives. This is another area that requires serious attention.

A final problem that was noted in the section on catalog results and was substantiated by the evaluation results is the lack of any significant attention to the problems and needs of special populations. Of the almost 500 instructional materials evaluated, 91% gave no specific recognition of special user needs, 7% gave some recognition, and a mere 2% gave serious recognition and provided activities uniquely suited for students with special needs.

6.6 Evaluation Results--Noncommercial Materials

Of the 2,193 noncommercial materials, a sample of 90 were evaluated for this study. Figure 6.11 shows the frequencies of scores of a sample of noncommercial materials on selected items from the evaluation instrument. Seventy percent of the materials were found to be free of race bias and 51% were found to be free of sex bias. Again, job denigration and religious bias were not found to be problems in the materials.

Over half of the evaluated materials were noninstructional. The instructional materials evaluated contained clear and specific objectives 68% of the time and procedures for evaluating attainment of the objectives 84% of the time.

Materials were, for the most part, adaptable to a number of instructional settings and strategies. In the great majority of materials, individualized instructional methods were included and provisions supplied for using the material in a more comprehensive education program. Materials were, in addition, usable without additional background information or training. Over three-fourths of the materials evaluated referenced additional resources.

Although noncommercial materials, on the whole, received high ratings on most items, a serious deficiency existed in the area of special user needs. None of the materials evaluated provided activities uniquely suited to students with special needs, and 96% of the materials gave no indication of recognition of special user needs. This area, as indicated

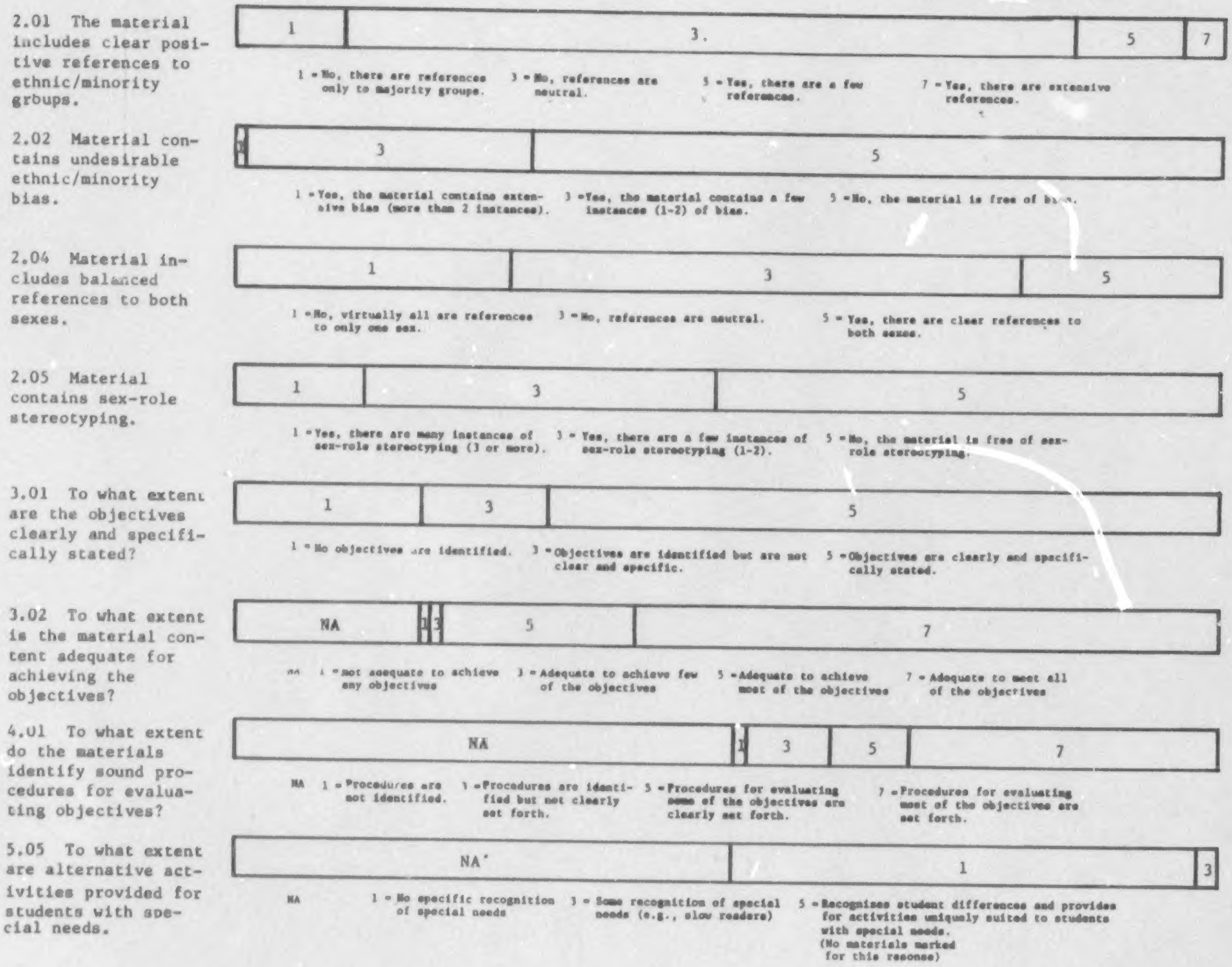

Figure 6.11. Noncommercial evaluation results on selected items. (Note that only instructional materials were included in calculations for items 3.01, 3.02, 4.01, and 5.05.)

in the catalog results, was most inadequate, indicating a major need for further efforts in materials development.

6.7 Summary

A survey of over 1,000 instructional and reference materials was undertaken for the purpose of updating previous surveys of commercial and noncommercial career education curriculum materials. Over 650 letters were sent to materials developers identified by their participation in the previous survey, by their participation in USOE-sponsored mini-conferences, by ERIC and AIR/ARM searches, and by recommendation of career education experts. Approximately 3,000 materials were screened, 2,900 were cataloged according to a version of the USOE catalog form, and 670 commercial as well as a randomly drawn sample of 90 noncommercial materials were evaluated according to a revised form of the evaluation instrument developed by Peat, Marwick, Mitchell & Co. in 1974.

Results of the cataloging procedure showed that commercial and noncommercial materials differ primarily with respect to the population for which they are targeted and the subject areas for which they are applicable. Commercial materials tend to be designed for direct use by students and thus are usually intended for secondary teachers, for use as supplements to the "regular" curriculum, and are usually textbooks, cassettes, films, and filmstrips. Noncommercial materials, perhaps because they are developed in many cases by local teachers themselves, are designed for teachers to use with students and thus place equal emphasis on all grade levels, are intended for use as part of the regular curriculum, and usually are curriculum guides. Because of their "supplemental" nature, commercial materials tend to describe particular occupations, whereas noncommercial materials describe activities that can be carried out in discipline areas so as to show the relevance of these studies to the work world.

Evaluation results for commercial materials showed that race and sex stereotyping has continued to permeate the great majority of materials, that only one-quarter of the material contained clear and specific objectives, and that 91% of the material gave no specific recognition of special user needs. Noncommercial material fared somewhat better in evaluation.

Seventy percent of these materials were found to be free of race bias and 51% free of sex bias, noncommercial instructional materials contained clear and specific objectives 68% of the time, but none of the noncommercial materials evaluated provided activities suited to students with special needs. Students with special needs thus remain neglected by both commercial and noncommercial career education materials developers. This situation clearly cannot and must not continue if career education is to be "for all persons."

CHAPTER 7

Career Education: A Response to Conditions Calling for Educational Reform

In An Introduction to Career Education (USOE, 1975), Kenneth B. Hoyt identified eleven "conditions calling for educational reform" that career education, as defined by the U.S. Office of Education, seeks to ameliorate. These conditions represent some of the most frequent and passionately voiced criticisms of the education system in the United States, and their improvement serves as an acid test of the worth of career education. In concluding this report, therefore, it must be asked how the actions taken so far in career education relate to the conditions in the nation's schools and the work world that called for this reform movement. The results of this survey indicate that while much has been done to alleviate a few of the problems and there is much agreement on ways to go about alleviating some additional problems, on other problems a great deal has yet to be done to find solutions. In this chapter we consider the relations of the results of the current surveys to these conditions.

1. *"Too many persons leaving our educational system are deficient in the basic academic skills required for adaptability in today's rapidly changing society."**

In his "Background Paper on An Introduction to Career Education: Conditions Calling for Educational Reform," Edwin L. Herr** noted that a potential contribution of career education to this condition is that career education can "provide a context in which students can acquire basic academic skills in less abstract ways than seem now to be the norm" (p. 12). Herr suggested that "tying such skill acquisition to concrete problems in living would be one alternative in this regard." According to the present survey, however, while 90% of the nation's school districts saw the teaching of basic academic skills as "absolutely necessary" (a larger percentage than for any other learner outcome of career education), work concepts, methods, and materials were being used to teach these skills to only one-quarter of the nation's students. Also, only one-fifth of the school districts were awarding educational credit on the basis of performance evaluation rather than time requirements in some of their courses. Furthermore, in only 3% of the districts were there career education programs being formally evaluated in terms of standardized measures of the attainment of basic academic skills. These frequencies were all about between five and ten percentage points greater in districts with formal career education policies than in others, a statistically significant but modest difference. Thus, this need for reform has not yet been extensively dealt with by the nation's schools, although its importance is recognized.

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*This and ten following quotations are from USOE (1975), An Introduction to Career Education, pp. 1-2.

**Herr, E. L. Background paper on An Introduction to Career Education: Conditions Calling for Educational Reform, unpublished paper, USOE, 1975.

2. *"Too many students fail to see meaningful relationships between what they are being asked to learn in school and what they will do when they leave the educational system. This is true of both those who remain to graduate and those who drop out of the educational system."*

In his paper Herr noted that "career education could serve as a vehicle to increase the opportunities available to students to select their educational options in line with their evolving interests or goals" (Herr, 1975, p. 24). He also suggested that "career education could well serve as a stimulus to a broader educational view of human talents and demands for these in the larger society." In short, career education can make more meaningful the relationship between school and work by either infusing work concepts into the standard curriculum or demonstrating the work value of school subjects or both of these. Results from the present survey show that attempts were being made to infuse work concepts into the curriculum in 60% of the nation's school districts; however, only about one in five elementary students and two in five secondary students were being "shown how skills learned in school are useful for work in various careers and occupations." In districts with formal career education policies, compared with others, the responses to this need were significantly higher in at least the elementary grades.

3. *"American education, as currently structured, best meets the educational needs of that minority of persons who will someday become college graduates. It fails to place equal emphasis on meeting the educational needs of that vast majority of students who will never be college graduates."*

Career education programs have directed special efforts to make schools relevant to the students who will not go on to college. However, they have simultaneously attempted to avoid separation of curricula and to bring together college-bound and non-college-bound students. The greatest acceptance of career education has been in areas with low income levels where the need for the schools to provide the avenue for upward mobility is greatest. In districts with career education activity, the percentage of students going on to full-time jobs and to college are both higher--the "none of the above" category is decreased. It seems, therefore, that the potential of career education for providing "the context in which individual learning styles and developmental characteristics become major ingredients of educational planning" (Herr, 1975, p. 35) is being realized.

4. *"American education has not kept pace with the rapidity of change in the postindustrial occupational society. As a result, when worker qualifications are compared with job requirements, we find overeducated and undereducated workers are present in large numbers. Both the boredom of the overeducated worker and the frustration of the undereducated worker have contributed to growing worker alienation in the total occupational society."*

In line with the aim of career education to identify for each individual his or her own unique potential, and in order to help students become aware of themselves and careers in time for extensive exploration during the formative years, districts with formal career education policies have increased testing of abilities and interests in the elementary grades to help students develop their self-concepts. The complete solution to this problem, however, must involve significant advances in both the prediction of future manpower demands and the design of educational programs to foster the abilities to make flexible career changes throughout one's life, such as through career-centered core curricula that will provide for respecialization when necessary.

5. *"Too many persons leave our educational system at both the secondary and collegiate levels unequipped with the vocational skills, the self-understanding and career decision-making skills, or the work attitudes that are essential for making a successful transition from school to work."*

Three of the nine learner outcomes designed as objectives for career education are directly related to this problem, and activities related to achieving the outcomes are central to career education both theoretically and in practice: Programs incorporating relevant activities for all three outcomes tend to have the highest levels of career education implementation. While the teaching of vocational skills is not new, the teaching of self-understanding, career decision-making skills, and work attitudes are receiving new emphasis in schools with career education programs. This increased emphasis represents a major step toward realization of the potential of career education for individual development described by Herr. He wrote:

> In essence, career education can provide the impetus to help educators of all types recognize that the transcendent goal of education is not simply helping youth acquire the fairly limited skills required to be a competent person. Instead the task is to help them attain personal competence which includes technical skills as well as the values, attitudes, understandings which permit them to use such skills wisely and effectively. (p. 45)

As noted above, results from the present survey indicate that this task is being accomplished.

6. *"The growing need for and presence of women in the work force has not been reflected adequately in either the educational or the career options typically pictured for girls enrolled in our educational system."*

Although special efforts have been undertaken recently in the schools to broaden the career opportunities for women, the evidence from this survey suggests that in 1974-75 there was still a great deal of inequality in terms of occupational stereotyping of women in career guidance materials and in terms of sex-stereotyping of enrollments in many vocational education courses. Efforts to reduce sex-stereotyping of careers in instructional materials were reported nearly equally frequently in schools with and without formal career education policies. It is apparent that the educational system can do more than at present to achieve equal career preparation and opportunities for women and men.

7. *"The growing needs for continuing and recurrent education of adults are not being met adequately by our current systems of public education."*

Adult open education programs were in existence in districts serving two-thirds of the nation's population (although in only 46% of the nation's school districts), and these programs were significantly more frequent in districts with formal career education policies. On the other hand, making students aware of such programs and their value was rated as one of the least important of the learner outcomes of career education, even in districts with formal career education policies. Although this need has been addressed, further efforts to remove the barriers between schools and work in the minds of all citizens are still needed if the schools are to maximize their relevance to the lives of individuals in the work world.

8. *"Insufficient attention has been given to learning opportunities which exist outside the structure of formal education and are increasingly needed by both youth and adults in our society."*

Where activity in career education was greatest, there also community involvement in the schools was highest. Many organizations outside the school systems, most notably the Scouts, were mentioned by respondents to the survey as carrying out career-relevant programs. Work experience activities were the most frequently mentioned effective career education activities. The importance of steps to bring schooling outside of the school walls into the community has been demonstrated but is in need of further promotion: Providing incentives for private sector participation was the lowest rated priority by survey respondents for Federal or State support of career education.

9. *"The general public, including parents and the business-industry-labor community, has not been given an adequate role in formulation of educational policy."*

Increased involvement of the community in educational policy-making has been a characteristic of districts with career education policy statements. However, only one in five districts in the country has yet established a local advisory committee for career education. When established, these committees have usually included representatives from the work world outside the schools; and when the coordination of local career education programs includes individuals with backgrounds in the work world, the overall level of career education implementation is higher. Thus, meeting this need has had positive impact on programs in the schools.

10. *"American education, as currently structured, does not adequately meet the needs of minority or economically disadvantaged persons in our society."*

Career education has aimed to broaden the career opportunities of young people from all sectors of society, and it has been implemented with equal frequency in districts with white and nonwhite majorities and in affluent and economically disadvantaged districts. Whether it will lead to better lives for the graduates of career education programs has yet to be proven, but the implementation of programs in these districts is promising because of its emphasis on making schooling relevant to the problems of coping with the work world.

11. *"Post high school education has given insufficient emphasis to educational programs at the sub-baccalaureate degree level."*

Because this survey was directed at career education activities at the primary and secondary leads, including colleges only as they train career educators, there is nothing in the results to indicate the amount of progress in alleviating this condition. However, a small positive correlation was noted between the level of career education activity in local school districts and the percentage of students going on to sub-baccalaureate programs as well as on to four-year colleges.

As a final summary, two needs appear to be especially prevalent in the schools on the basis of these survey results. First, there is the need for support for staff development programs in career education. Only 20% of the nation's teachers were involved in any career education staff development activities in 1974-75; and these activities when present were highly indicative of extensive career education activity. Second, there is a need, not nearly so frequently expressed, but apparent, for evaluation of career education programs, both in terms of the short-term effectiveness of particular activities in local districts and in terms of a large scale long-term evaluation of the payoffs of such an educational reform, both in terms of renewed vitality and confidence in the schools and in terms of individuals' greater attainment of fulfilling roles in the work world as a result of participating in career education activities.

CHAPTER 8

Statement of the National Advisory Council for Career Education

This entire chapter was prepared by the Council. Is is included here pursuant to Public Law 93-380, Section 406(3) and Section 406(g)(4). See the end of the chapter for the list of Council members.

The Council, which is appointed by the Secretary of Health, Education, and Welfare, submitted an "Interim Report with Recommendations for Legislation" to the Congress in November 1975. The following disclaimer, contained in that publication, applies to Chapter 8: "The opinions expressed . . . do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred."

Statement of the National Advisory Council for Career Education

The baseline data presented in this survey report demonstrate that career education as a concept has found ready acceptance within the nation's schools. The rate of its adoption has been remarkable, given that the term was first used publicly in 1971 by Sidney P. Marland, then Commissioner of Education. The tremendous array and variety of career education activities and procedures reported in this document as being provided to students in those schools where career education has been tried out attest to the viability and usefulness of the concept "career education." Above all, however imperfect its definition, impressive gains have been made in those schools to facilitate and improve students' understanding of the relationship between education and work.

The legislation (P.L. 93-380) that established the National Advisory Council for Career Education charged that the Council conduct, with the assistance of the Commissioner of Education, a status survey of career education within the United States and to submit to Congress its findings, including recommendations for new legislation and to do so no later than November 1, 1975. Since the Council was not assembled until March 31, 1975, and this survey was not begun until June 1, 1975, it was not possible to meet that deadline. However, conditions regarding educational legislation in late summer and early fall 1975 were such that the Council chose to formulate certain legislative recommendations, which it submitted to Congress. Those recommendations, based upon the experience and expertness of Council members, various consultants and Office of Career Education personnel, were presented in an Interim Report with Recommendations for Legislation and transmitted to the Congress in early November 1975.

About March 10, 1976, individual Council members received a preliminary draft of this survey report. The Council's Survey and Assessment Committee, meeting on March 23, reviewed the initial report with representatives from the American Institutes for Research and the U.S. Office of Education. The Committee decided, given the array of data and the extremely short time span (April 15) available to prepare Council recommendations drawn from this survey report, that it would confine its observations at this time to that of determining whether the legislative recommendations presented in the Interim Report were supported or contradicted by the survey data. At the March 24 meeting, the Council approved the Committee's position and, because it believed the findings, conclusions, and implications of this survey report deserve careful and systematic examination for their educational and legislative relevance, decided that a second and more complete report would be prepared and issued at a later date. The remainder of this statement describes the Council's assessment of its early legislative recommendations viewed from information presented in this survey report.

The recommendations put forth in the Interim Report were confined to legislation designed for elementary and secondary schools, for the Council believed that this sector of the educational enterprise was ready to move from the demonstration projects supported by existing Federal funding to a limited developmental base. Nine major goals were set forth in the recommendations for career education legislation and as areas for funding. These will be summarized here along with those findings drawn from this report that bear upon them. It should be remembered that the survey and assessment project did not directly attempt to collect data on the Council's legislative recommendations. The survey was underway prior to the time that the Council submitted its Interim Report.

The first recommendation was that financial support should be given to each State to prepare a plan for career education. Survey findings were that 42 States have formulated and adopted a formal written career education policy but only 27 States included a plan for the organization of career education activities in their formal policy statement. Eighteen States reported that they had established a Career Education Advisory Committee. State advisory committees may not have had the opportunity for any involvement or input into policy statements. These data reflect that since 1971 the States have exercised leadership in career education but much remains to be done. Federal financial support will continue to be required by the States to formulate comprehensive and systematic State plans that move career education beyond its demonstration to a developmental level. The Council reaffirms its recommendation that funds and authority be provided for the Commissioner of Education to make grants to State education agencies for the purpose of formulating and reviewing State plans for career education.

The second recommendation was that a coordinator for career education was to be employed at the State level with primary responsibility for assisting local school districts to implement career education and for general supervision of the State's career education activities. Survey data suggest that 28 States employed statewide coordinators on a full time basis to work solely in career education. However, in only 6 States were there more than five full-time equivalent individuals working solely on career education. While the educational preparation of most personnel assigned as career education coordinators or consultants had been in either vocational education or school counseling, other preparation areas were represented.

These data demonstrate that while progress has been made by the States toward the goal of establishing State coordinators of career education, the need still exists for such personnel in many States and Territories. Moreover, the importance of State career education coordinators and consultants was made clear by survey data that suggested that in those local districts who were familiar with the State coordinator of career education for their State, the level of career education activities was significantly greater than in those school districts located in States without a career education coordinator. The development of career education at the local level has been uneven and the need for leadership at the State level was acknowledged by personnel in the local school districts. The Council reaffirms its recommendation that career education coordinators and consultants be established in State education agencies and that Federal funding be made available for that purpose.

The third recommendation was that each State was to prepare an annual evaluation report showing its problems and progress in implementing career education. Survey data show 30 States in 1974-75 report carrying out some type of evaluation of career education. However, only 34% included formal plans for evaluation in policy statements of career education. Nationwide, 24% of the local school districts carried out some form of career education evaluation, but only a fraction of these evaluation efforts were designed to collect empirical data bearing upon student behaviors.

Clearly, there is an urgent need to know what techniques and procedures, when used by what kind of career educators with what students for how long and in what sequence, advance students' career development. State education agencies have only begun to respond to this need, and little technical assistance has been brought to bear upon the problem. The evaluation of the effectiveness of career education activities is considered fundamental to enlightened management. Therefore, the Council reaffirms its recommendation that each State prepare annual evaluation reports on career education and that Federal financial support be provided for this purpose.

The fourth recommendation was that career education reviews be conducted for school board members, school administrators, and community leaders. Since the Council believed that implementation of career education depended greatly upon the enlightened action of these groups, it proposed that special meetings be held for them throughout each State to present the concepts, principles, and practices of career education. Survey data report that the involvement of the business, labor, government, and industry community in career education planning and implementation related positively to the level of career education activities conducted in local school districts. Although only a fifth of the nation's local school districts had a Career Education Advisory Committee, the most central component of local educational policy that contributed to the development of career education was that of involving the community in educational policy making. The Council believes that these and other data suggest that the key to advancing career education at the local level may lie in enlisting the aid and support of community members. A concerted educational effort is required to inform community leaders as to what career education is and how they can become involved in its implementation. The Council reaffirms its recommendation that funds be provided for the Commissioner to make grants to State education agencies for the purpose of communicating career education concepts to school board members, school administrators, and local community representatives.

The fifth and sixth recommendations were that provisions should be made by each State for inservice education of teachers and counselors. Both teachers and counselors were viewed as key personnel in implementing career education. Survey data reflect that inservice education was rated as of the highest importance by both local school districts and State education agencies. Approximately half of the responding local school districts reported that some type of career education staff development activities were conducted in 1974-1975. In these schools, about 33% of all teachers were involved, while the percentage of counseling personnel was about double that for teachers. However, large numbers of teachers and counselors have not had the opportunity to develop a clear understanding of career education and, above all, to improve their competencies so as to function effectively in this complex area. Therefore, the National Advisory Council reaffirms its recommendations that each State plan for career education should reflect how the State intends to manage inservice education for teachers and counselors and that Federal financial support for this goal is urgently needed.

The seventh and eighth recommendations were that local career education coordinators were to be employed at the school district level and that provisions were to be made for "outreach" preparation programs for these coordinators. Survey data report that only about one-third of the nation's students were enrolled in districts that employed full-time coordinators of career education. The overall level of career education activity was significantly greater in those districts in which a coordinator was present than in those districts that did not employ such a person.

A diversity of educational backgrounds and previous experiences existed among those employed to coordinate career education in local districts: the background of 55% of them included counseling; of 36%, school administration; of 29%, vocational education teaching; of 9%, non-vocational education teaching; and of 4%, experience in the business, labor, and industry community. Survey data of considerable import are those findings that the overall level of career education activity was significantly higher in those districts in which the coordinating staff's background included previous experience in business, labor, or industry.

Two important features of career education emphasized in most school districts are experiential learning activities and community involvement. Both of these features require considerable time, skill, and sensitivity to bring about at the local district level. The fact that many districts have not employed career education coordinators and the wide variety that exists in the preparation and previous experiences of those who are employed support the need for grants to employ local school district coordinators and to provide preparation programs to upgrade their competencies. Therefore, the Council reaffirms its recommendations for these goals.

The final recommendation was that funding be allocated to school districts to purchase career education materials to establish career education resource centers. Survey findings were that local school districts expressed a great need for materials and sought them both from publishers and their own staff members. Limitation of funds for materials as well as other costs was consistently stated as a factor critical to the future of career education.

Some 900 commercially produced career education materials as well as numerous others produced by local schools were reviewed by the survey team. Their review led them to suggest that most of these materials were adaptable to a number of organizational, staffing, and instructional patterns and modes. The survey team noted that the majority of these materials lacked clearly stated objectives, contained sex and race bias, and failed to present evidence of being field-tested. There was evidence in a majority of sampled school districts that teachers and other staff members were sensitive to the existence of potential sex and race bias and were taking steps to eliminate these biases from instructional materials. Future inservice education programs could well feature "consumer awareness" of instructional materials, including their selection and evaluation. The Council reaffirms its recommendation that development and/or purchase of instructional materials for local career education resource centers is needed and that Federal funding is required if the 16,338 school districts are to achieve this goal.

Based upon these and other survey data, the National Advisory Council for Career Education concludes that its legislative recommendations were on target. Their primary thrust was to enable elementary and secondary education to move the existing level of pilot, model, or demonstration projects to a "developmental" level of career education. These recommendations sought to do so principally by making it possible for State and local educational agencies to set into place certain key personnel and to bring into being urgently needed components such as inservice education to improve the competencies of these professionals in the school and community to function effectively in career education.

In retrospect, these recommendations may seem unduly modest or overly cautious, given the current state of career education. Few doubt the readiness or ability of State or local educational agencies to implement them or question the present capability existing within the Office of Education for exercising leadership in career education. The recommendations were but a step. But it is a step forward that could and should be taken...now. For to do so could sell mean that many more among the nation's children stride more confidently into the future because they experience and understand the links between that which they do now and later.

The National Advisory Council for Career Education expresses its appreciation to the American Institutes for Research for its conduct of this survey, to the Office of Education for its able assistance, and to Larry J. Bailey, Chairperson of the Council's Survey and Assessment Committee, for his competent work and leadership in making this report a reality.

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Footnotes:

(a) Term expired in November 1975.
(b) Term expires in November 1976.
(c) Term expires in November 1977.
(d) Term expires in November 1978.

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APPENDIX A

Project Chronology

Dates	Activities
3/19/75	Request for proposal received
4/7/75	Proposal submitted
5/30/75	Notification of award
6/2/75	Contract period begins
6/9-13/75	Meeting with State officials
6/9/75	Initial notification to AACTE
6/28/75	Meeting with project monitors at AIR-Palo Alto
7/8-15/75	Meetings between AIR and AACTE on design of questionnaire for schools of teacher education
7/15-31/75	Notification of State Career Education Coordinators
7/18/75	Drafts of questionnaires for surveys of local school districts and schools of teacher education submitted
7/28/75	Meeting with John Evans and Kenneth Hoyt to report on survey progress and obtain counsel
7/31/75	Design for survey of materials submitted
8/1-31/75	Field testing local school district questionnaire
8/5/75	School district sample chosen
8/15/75	Second draft of local school district questionnaire submitted
8/21/75	Discussion with representative of CCSSO (CEIS)
8/25/75	Local school district questionnaire submitted for clearance
8/15/75	Letters to publishers and mini-conference participants mailed requesting materials
8/25/75	Notification of Chief State School Officers
8/28/75	Special sample design completed
8/1/75-9/30/75	Materials evaluation procedures tested and refined
8/1/75-9/30/75	Materials in USOE library catalogued
9/1/75	Cataloguing of materials at Palo Alto begun
9/5/75	Renotification of State Career Education Coordinators completed (by telephone)

Dates	Activities
9/12/75	Special sample districts selected
9/1-30/75	Procedures for special sample interviews tested
9/24/75	Questionnaire for schools of teacher education submitted for clearance
9/26/75	School district survey interviewers hired, training begun
10/1/75	Evaluation of commercial materials begun
10/1/75	Special sample contacts begun
10/11/75	School district questionnaire cleared
10/17/75-11/7/75	Initial phase of school district survey contact
10/17/75	Questionnaire for schools of teacher education cleared
10/21/75	Telephone numbers received from CIC
11/10/75	25% of school district questionnaires received
11/10/75-12/5/75	Second phase of school district survey contact
11/19/75	Schools of teacher education questionnaires mailed
11/21/75	50% of school district questionnaires received
11/24/75	SEA questionnaire mailed
11/28/75	First draft of review of other surveys completed
12/5/75	75% of school district questionnaires received
12/8/75-1/23/76	Third phase of school district survey contact
12/9/75	Remainder card mailed to schools of teacher education
12/11/75	Meeting with project monitors in Palo Alto
12/15/75	Questionnaires mailed to outlying Territorities
12/15/75-1/9/76	Follow-up calls made by AIR to schools of teacher education
1/15/76	Cataloguing of materials at Palo Alto completed
1/15/76	Evaluation of materials completed
1/23/76	Closing date for school district survey (860 out of 900 received)
1/24/76	Special sample interviews completed
1/31/76	School district questionnaire coding completed
2/15/76	School district survey tape ready for analysis
2/22/76	Draft of schools of teacher education survey results received by AIR from AACTE

Dates	Activities
3/5/76	16 case study reports drafted
3/5/76	Computer files for materials catalog prepared
3/8/76	Draft final report and executive summary prepared
3/23-24/76	Discussion of survey results by National Advisory Council for Career Education
4/1-30/76	Secondary data analyses carried out
4/20/76	Second draft of final report submitted for clearance
5/7/76	Recommendations for final changes received
5/20/76	Final report in camera-ready form submitted for approval to print
5/25/76	Approval to print received
5/28/76	Final report and executive summary printed and delivered

APPENDIX B

Survey Instrument for Local School Districts

This survey instrument was developed by the American Institutes for Research in cooperation with the National Advisory Council for Career Education and the U.S. Office of Education, and was used to assess the status of career education in 900 local school districts and in the outlying Territories. The results from this survey are summarized and discussed in Chapter 3. The career education materials most frequently recommended by school districts in response to Question 9 of the questionnaire are listed in Table B-1, following the questionnaire.

Expiration Date: 3/31/76
OE No. 435

SURVEY OF CAREER EDUCATION

IN THE PUBLIC SCHOOLS OF THE UNITED STATES

1975

CONDUCTED IN COOPERATION WITH

THE NATIONAL ADVISORY COUNCIL FOR CAREER EDUCATION

and the

OFFICE OF EDUCATION
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

by

AMERICAN INSTITUTES FOR RESEARCH
P. O. BOX 1113
PALO ALTO, CALIFORNIA 94302
Phone (415) 493-3550

Please read the following questions and answers regarding procedure
before filling out the questionnaire

A. WHO SHOULD COMPLETE THE QUESTIONNAIRE?

We ask that the school District Superintendent be **responsible** for responding to the survey. However, in many cases, he or she may **delegate** the task of answering the questions to the person who is most familiar with district activities in the areas of career education. We therefore ask for the name and position of the **actual** respondent to facilitate analyses of the data.

Primary Responding Individual

Position

B. WHAT INFORMATION IS BEING REQUESTED?

In **Section 1**, pages 2-7, questions concern **activities** occurring in your school district—their content, their purpose, and their scope.

In **Section 2**, page 8-10, questions concern the development in your school district of career education **policies**. Questions about the community in which your district is located are also included.

In **Section 3**, pages 11-12, an opportunity to express your **opinions** concerning career education—its needs and future directions—is given.

The information is intended to provide an overall picture of career education in the schools, and each school district's responses will remain confidential. Published data will be aggregated over many school districts. We hope, therefore, you will feel free to describe both successes and shortcomings of career education in your district.

All questions may be answered by blackening the appropriate circles, except for the few which require the respondent to fill in a blank. Either pencil or pen may be used.

C. HOW LONG DOES IT TAKE TO FILL OUT THE QUESTIONNAIRE AND WHAT IS THE DEADLINE?

Pretesting has indicated that it takes about 45 minutes to complete the questionnaire if the information is readily available. The respondent may call (415) 493-3550 ***collect*** and ask for Mr. William Taylor, if he or she finds difficulty in answering any questions.

Because of the short time available for completion of the survey analyses, questionnaires will be processed as they are returned. The processing schedule has been designed under the assumption that responses will be returned **no later than**

D. WHAT IS THE MEANING OF "CAREER EDUCATION" AS USED IN THE QUESTIONNAIRE?

The term "career education" refers to a comprehensive, innovative reform of the U.S. public school system begun in the late 1960's and early 1970's. This innovation is based on the belief that one of the fundamental objectives of schools is to provide experiences through which students can learn about and prepare to engage in work as part of their way of living.* Accordingly, all students are to be taught basic academic skills; equipped with good work habits; made capable of choosing personally meaningful work values; equipped with career decision-making and job-getting skills and with entry-level vocational skills; made aware of available means for continuing education; and made capable of incorporating work values into their total value structure in such a way as to achieve a desirable life-style.

Career education has objectives that are related to the objectives of many vocational education programs across the country. Yet it goes beyond those vocational education programs that focus specifically on providing job skills to selected individuals. Career education is concerned with relationships between education and **all** work—paid or unpaid—that an individual does; career education is concerned with the **complete** process of career development—beginning in the preschool years and continuing through all of life; and career education is concerned with **all** students—from kindergarten through graduate college.

Career education is complex, encompassing the efforts of diverse individuals across the country. It is not our purpose here to recommend a single definition, but merely to provide a framework for responding to this questionnaire. If there are activities and objectives in your school district which relate to the description presented here, please include them in responding to the questionnaire.

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*An Introduction to Career Education, a policy paper of the U.S. Office of Education.

SECTION I: CAREER EDUCATION-RELATED ACTIVITIES

1. What **instructional techniques** were used in 1974-75 to help students in your district **learn about and prepare for work**? (Please check all that apply.)

○ Books, library searches
○ Career center experiences
○ Computer-assisted instruction
○ Discussion
○ Field trips
○ Films, tape, radio, TV
○ Following workers around on a job to see what they do
○ Guest speakers
○ Group career counseling
○ Individual career counseling
○ Lecture
○ On-the-job work experience
○ Programmed learning
○ Role-playing
○ Simulated work experiences in the school (e.g., wood shop)
○ Unpaid work experience
○ Other ________ please describe

2. Please list some of the most effective activities undertaken in your school district to help students learn about and prepare for work. For each activity you list, indicate grade levels involved and (by filling in the appropriate circles ●) those persons who were involved in its performance.

Activities	Grade Level	Teachers	Counselors	Administrators	Parents	Bus./Labor/ Indus./ Govt. Representatives	Other (Specify on line provided)	
________	____	○	○	○	○	○	○	________ please specify
________	____	○	○	○	○	○	○	________ please specify
________	____	○	○	○	○	○	○	________ please specify
________	____	○	○	○	○	○	○	________ please specify
________	____	○	○	○	○	○	○	________ please specify
________	____	○	○	○	○	○	○	________ please specify

3. How were those activities which were intended to help students learn about and prepare for work **integrated with** other instructional activities in your district in 1974-75? (Please check all that apply.)

	Grade Level		
	Elementary	Junior High	Secondary
Integrated into vocational education courses	○	○	○
Integrated into other subjects (e.g., Language Arts, Mathematics, Social Studies)	○	○	○
In a separate unit with academic credit (e.g., course on Career Planning)	○	○	○
Separate from school curriculum (e.g., Career Fair sponsored by local industry)	○	○	○

4. Which of these educational practices were in effect in 1974-75 and/or are planned (or are in effect) for 1975-76 in your school district?

Educational Practices	In Effect 1974-75	Planned or In Effect 1975-76
a. There is a **de-emphasis** on assigning students to clearly **differentiated curricula** (e.g., to a general education, college preparatory, vocational education, etc. curriculum).	○	○
b. Educational **credits** are awarded in some courses on the basis of **student performance evaluation**, as opposed to the Carnegie unit.	○	○
c. Educational **credits** are awarded on the basis of learning and work experiences which take place **outside the school**.	○	○
d. An **open entry/open exit** educational system is provided so that students may leave school to work and return in accordance with their needs and educational motivation.	○	○
e. Courses are offered **year-round** (e.g., 12-month utilization of educational facilities).	○	○
f. Individuals from business/labor/industry/government are used as a resource in the instructional program.	○	○
g. Students, teachers, parents, members of the business/labor/industry **community** are involved in educational **policy-making**.	○	○
h. **Adult and continuing education** courses are provided, with open enrollment.	○	○

5. In your school district what **grades** make up these grade levels?

Elementary = **grades** K – ____

Junior High = **grades** ____ – ____

Secondary = **grades** ____ – 12

6. For each of these **grade levels**, how many schools are there in your district?

Elementary = ____ schools

Junior High = ____ schools

Secondary = ____ schools

7. **Please read the activities listed in the left-hand column and check (by filling in the appropriate circle ●) for which grade levels and by which persons they were undertaken during the 1974-75 school year. If an activity was not undertaken, do not mark any of the columns to the right.**

	GRADE LEVELS			PERSONNEL PERFORMING ACTIVITY						
Activity	Elementary	Junior High	Secondary	Teachers	Counselors	Administrators	Parents	Bus./Labor/Indus. Representatives	Other (Specify on line provided)	
a. **The public was told about policies, goals, or activities designed to promote students' learning about and preparing for work.**	○	○	○	○	○	○	○	○	○	please specify
b. **Published materials were obtained from outside sources to help students learn about and prepare for work.**	○	○	○	○	○	○	○	○	○	please specify
c. **Published materials from outside sources were adapted to help students learn about and prepare for work.**	○	○	○	○	○	○	○	○	○	please specify
d. **Special materials were developed locally to help students learn about and prepare for work.**	○	○	○	○	○	○	○	○	○	please specify
e. **Student career education experiences were explicitly coordinated across grades.**	○	○	○	○	○	○	○	○	○	please specify
f. **One or more School Career Education Centers (central facilities for career information, counseling, and placement) were provided.**	○	○	○	○	○	○	○	○	○	please specify
g. **Business/labor/industry/government representatives were encouraged to assist in implementing career education.**	○	○	○	○	○	○	○	○	○	please specify
h. **Parents, either individually or in groups, were given assistance in providing career guidance for their children.**	○	○	○	○	○	○	○	○	○	please specify

8. How was career education publicized in your school district during 1974-75? (Please check all that apply.)

○ Meetings with community groups
○ Mass media (newspapers, TV, radio)
○ Bulletins sent to students' parents
○ Other ______________________
please describe

9. Considering all of the commercial and non-commercial materials designed to help students learn about and prepare for work, developed **non-locally** but used in your district, please list two you highly recommend.

1. ______________________

2. ______________________

10. What sources were used by district staff to identify career education materials? (Please check all that apply.)

Professional Organizations:
○ Meetings
○ Publications

U.S. Office of Education:
○ Meetings
○ Publications

State Education Agency:
○ Meetings
○ Publications

National Institute of Education:
○ Meetings
○ Publications

○ ERIC or AIM/ARM
○ Other ______________________
please specify

11. Were steps taken by district staff to remove sex-stereotyping of careers (e.g., women presented as nurses or homemakers only and men as technicians or executives only) from curriculum materials?

○ Yes
○ No, this is not a problem
○ No, other problems have higher priority

12. Were steps taken by district staff to remove racial bias from career education curriculum materials?

○ Yes
○ No, this is not a problem
○ No, other problems have higher priority

13. For students in each ethnic group represented in your district, *approximately* what percent participated in career education activities in 1974-75? (Please check **one** in each row.)

	Not represented in the district	Few Participated (1%-20%)	Many Participated (21%-80%)	Nearly All Participated (81%-100%)
a. American Indian	○	○	○	○
b. Black	○	○	○	○
c. Oriental or Asian	○	○	○	○
d. Spanish surname	○	○	○	○
e. White	○	○	○	○
f. Other ______________ please specify	○	○	○	○

14. Please check those groups for whom **special** career education efforts, aimed at broadening career opportunities, were made in either regular or special classes in 1974-75.

	Elementary		Junior High		Secondary	
	Regular Classes	Special Classes	Regular Classes	Special Classes	Regular Classes	Special Classes
a. Gifted or talented	○	○	○	○	○	○
b. Mentally retarded (including both educable and trainable mentally retarded students)	○	○	○	○	○	○
c. Physically handicapped (including both aurally and visually handicapped students)	○	○	○	○	○	○
d. Ethnic minorities	○	○	○	○	○	○
e. Female	○	○	○	○	○	○
f. Other ______________ please specify	○	○	○	○	○	○

15. *Approximately* what percentage of students in these classes in 1974-75 were females? (Please check **one** in each row.)

Type of Class	% Females 0%	1-25%	26-75%	76-99%	100%
a. Trade and Industrial (e.g., Auto Shop, Wood Shop)	○	○	○	○	○
b. Business and Office	○	○	○	○	○
c. Home Economics	○	○	○	○	○
d. Agricultural	○	○	○	○	○
e. Distributive Education (e.g., Personal Services, Food Services)	○	○	○	○	○
f. Health	○	○	○	○	○

16. What is the position taken with respect to college-bound students enrolling in vocational education classes? (Please check **one**.)

○ They are required.
○ They are encouraged.
○ They are not influenced.
○ They are discouraged.

17. For those **students who graduated in 1975**, *approximately* what percent went on directly to the following: **(These percentages should total 100%)**

a. College (2 year or 4 year) ______ %
b. Postsecondary technical education ______ %
c. Full-time employment ______ %
d. None of the above ______ %
TOTAL ______ %

If information unavailable, mark here. ☐

Answer Questions 18-21 **only** if Staff Development Activities in Career Education were carried on in your school district during 1974-75

18. *Approximately* what percentage of these school personnel participated in staff development activities in the area of career education in 1974-75?

School Personnel	Percent Participation
a. Elementary school teachers	____ %
b. Middle or junior high school teachers	____ %
c. Senior high school teachers	____ %
d. Elementary school guidance personnel	____ %
e. Middle or junior high school guidance personnel	____ %
f. Senior high school guidance personnel	____ %
g. Elementary school administrators	____ %
h. Middle or junior high school administrators	____ %
i. Senior high school administrators	____ %
j. Paraprofessionals (e.g., career guidance technicians, teacher aids, etc.)	____ %
k. Librarians	____ %
l. School health workers	____ %
m. School social workers	____ %
n. Other ____________ please specify	____ %

19. How were staff participants compensated for these efforts? (Please check all that apply.)

○ They received released time from regular assignments.
○ They received money in addition to their regular salary.
○ They received college credit.
○ Other ____________ please specify

20. What were the principal sources of funds for these career education staff development activities? (Please check all that apply.)

○ Local school district budget
○ State government
○ Federal government
○ Other ____________ please specify
○ Business/labor/industry groups
○ Participants

21. For each of those topics included in staff development activities during 1974-75, please indicate (by filling in the appropriate circle ●), the techniques and/or material that were used in these activities, and, when the activities were conducted.

	TECHNIQUES AND MATERIALS															TIME					
Topics	Published staff development materials (films, etc.)	Locally prepared staff development materials	Presentations by local school staff experts	Presentations by experts from institutions of higher education	Presentations by experts from business/labor/industry	Presentations by State Career Education experts	Visits to business/labor/industry or other community sites	Visits to other Career Education sites	Workshops by professional organizations	Workshops by private firms	Attendance at professional meetings	Group sharing sessions among school staff	Work experience in fields outside education	Summer sessions at college	Others (Please specify) ____	During school hours	Before or after school hours	On "institute" or "teacher work" days	Summer or other vacation	Weekends	Other (Please specify) ____
a. Career Education Concepts	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
b. Teaching Techniques for Career Education	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
c. Curriculum Materials for Career Education	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
d. Evaluation Techniques for Career Education	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
e. Community Resources for Career Education	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

22. Please read the activities listed in the left-hand column and check (by filling in the appropriate circle ●) the grade levels, percentages of students participating, and personnel involved in them **on a regularly scheduled basis** during the 1974-75 school year. If an activity was not undertaken, do not mark any of the columns to the right.

	Grade Level and Percentage of Students Participating									Personnel Involved					
	Elementary			Middle			Secondary								
	A Few (1%–20%)	Many (21%–80%)	Nearly All (81%–100%)	A Few (1%–20%)	Many (21%–80%)	Nearly All (81%–100%)	A Few (1%–20%)	Many (21%–80%)	Nearly All (81%–100%)	Teachers	Counselors	Administrators	Bus. Labor Indus. Govt. Representatives	Other (specify on the line provided)	
a. Students were taught facts, terms, and concepts about various careers or occupations.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
b. Students were shown how work relates to the individual and to society in general.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
c. Students' abilities were formally assessed to increase their self-knowledge and to help them in thinking about or planning careers.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
d. Students were told about attitudes, habits, and values related to various careers or occupations.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
e. Students were assisted in clarifying and/or developing their own self-concepts, including interests, attitudes, and values with respect to work.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
f. Students were shown how to consider particular careers or occupations in terms of their own individual values, interests, and abilities.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
g. Students were taught decision-making skills to help them consider career plans or occupational choices.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
h. Students were shown how to find information about careers or occupations.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
i. Students were shown how to use work experiences to evaluate occupations.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
j. Students were helped to indentify one or more careers for further exploration.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
k. Students were shown how skills learned in school are useful for work in various careers or occupations.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
l. Students were told of the rewards (e.g., money, satisfaction) offered by various careers or occupations.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
m. Students were taught skills for seeking and gaining employment.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
n. Students were taught vocation-specific skills.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify
o. Work methods, materials, and concepts were used in teaching basic skills such as reading and arithmetic.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	please specify

SECTION 2: SCHOOL DISTRICT POLICIES

For Questions 23-27, mark either "Yes" or "No" and go on to answer the questions in the box indicated.

23. **Has your board of education or board of trustees adopted, or does it plan to adopt, a formal written policy with regard to career education in the school district? (*NOT* a formal written policy for vocational education only)**

○ Yes →

Adopted in the 19 _____ - _____ school year.

If possible, please return a copy of this policy statement with the questionnaire.

(Please check all that apply)

○ Includes specific student outcome objectives.

○ Includes a plan for organizing career education activities.

○ Includes a plan for evaluating career education activities.

(Go on to question 24.)

○ No →

(Please check all that apply)

○ Due to insufficient local interest in career education.

○ Due to insufficient local funds available for career education.

○ Due to lack of consensus on what the goals of career education should be.

○ Due to priority of other pressing problem areas over career education:

____
please specify one such area

○ Due to the success of career education activities without a formal written plan.

○ Due to the fact that the description of career education, as presented in this questionnaire, was considered and rejected.

○ Other _______________________________
please specify

(Go on to question 24.)

24. **Were funds specifically allocated for career education (not including vocational education) in your school district during the 1974-75 school year and for the 1975-76 school year?**

○ Yes →

(Please check all that apply and, if possible, fill in estimates)

	1974-75	1975-76
○ Local school budget	$ ________	$ ________
○ Federal funds	$ ________	$ ________
○ State funds	$ ________	$ ________
○ Other	$ ________	$ ________

(Go on to question 25.)

○ No →

(Please check all that apply)

○ Career education is included within the vocational education budget.

○ District staff are encouraged to engage in career education activities within existing budgets.

○ A request for such funds was made but was not approved.

○ Other _______________________________
please specify

(Go on to question 25.)

25. Were individuals employed by your district during the 1974-75 school year *specifically* for work in **career education**?

○ Yes

○ No

(If Yes:)

(Please check all that apply)

○ Including ____ full-time individuals
(number)

○ Including ____ part-time individuals
(number)

○ Including individuals in the district office

○ Including individuals in the schools

○ Including mostly staff members of the vocational education program

○ Including mostly staff members of the guidance and counseling program

○ Including individuals **not** a part of the vocational education program or the guidance and counseling program

The person now in charge of district **career education** activities was trained primarily as:

○ A guidance counselor

○ A school administrator

○ A vocational education teacher

○ A non-vocational education teacher

○ A person from the business/labor/industry community

○ Other ____
please specify

(Go on to question 26.)

(Please check all that apply)

The individuals responsible for providing experiences through which students learn about and prepare for work are:

○ Vocational education staff

○ Guidance and counseling staff

○ Other district staff ____
please specify

○ Individuals other than district staff

____
please specify

(Go on to question 26.)

26. Were formal **evaluations** of career education activities carried out in your school district during 1974-75?

○ Yes

○ No

*"If possible, please **return report(s)** with the questionnaire."*

(Please check all that apply)

○ Using standardized tests of career development

○ Using expert judgments

○ Using teacher ratings

○ Using students' ratings while in school

○ Using students' ratings a year or more after school

○ Using a special school district evaluation team

○ Using standardized tests of basic skills

○ Using expressed attitudes of persons in the community (e.g., newspaper editorials, PTA notices)

○ Other ____
please specify

(Go on to question 27.)

(Please check all that apply)

○ But one is planned.

○ There are insufficient funds to conduct an evaluation.

○ There is no need for an evaluation now.

○ But informal evaluations were made.

(Go on to question 27.)

27. Does your district have a formally constituted Advisory Committee for Career Education?

○ Yes → (Please check all that have served on the committee)

○ Teachers

○ Counselors

○ Administrators

○ Parents

○ Students

○ Business/labor/industry representatives

○ Community service organization representatives

○ Local government representatives

○ Other ____________________
please specify

(Go on to question 28.)

○ No → (Please check all that apply)

○ But there is an Advisory Committee for Vocational Education which considers the topic area.

○ But there is an Advisory Committee for Curriculum which considers the topic area.

○ Other ____________________
please specify

(Go on to question 28.)

28. What other organizations or programs are involved in career education in your district (e.g., Scouts, Chamber of Commerce, labor unions, 4-H, Junior Achievement)?

____

____

Demographic Questions

29. What is the name of the city or town constituting the largest part of your school district?

____

30. Approximately what percentage of the students in the district represent the following groups: **(These percentages should total 100%.)**

_____% American Indian
_____% Black
_____% Oriental
_____% Spanish Surname
_____% White
_____% Other
_____% TOTAL

31. Approximately what percentage of the students in the district are from families whose total annual income falls in the following ranges: **(These percentages should total 100%.)**

_____% Under $5,000
_____% $5,000 — 9,999
_____% 10,000 — 14,999
_____% 15,000 — 19,999
_____% 20,000 or more
_____% TOTAL

32. Approximately what percentage of the students in the district are children of: **(These percentages should equal 100%.)**

_____% White collar workers
_____% Blue collar workers
_____% Farmers
_____% Welfare/itinerant/not regularly employed persons
_____% TOTAL

SECTION 3: OPINIONS

(Please complete this section in terms of **viewpoints prevailing in your school district**, in so far as possible.)

33. How much have these factors contributed to the overall **success** of Career Education in your district? (Please check one in each row.)

	Greatly	Somewhat	No contribution
Endorsement of staff	○	○	○
Endorsement of business/labor/industry community	○	○	○
Endorsement of parents	○	○	○
Availability of funds	○	○	○
Availability of curriculum materials	○	○	○
Assistance from State educational agency	○	○	○
Assistance from Federal government	○	○	○
Support of the Superintendent	○	○	○
Other ______ please specify	○	○	

34. How much have these problems contributed to the overall **difficulty** for your district in implementing Career Education? (Please check one in each row.)

	Greatly	Somewhat	No difficulty
Lack of trained staff	○	○	○
Resistance of staff to Career Education	○	○	○
Lack of funds to train staff	○	○	○
Lack of funds to purchase materials	○	○	○
Lack of funds for making curricular changes	○	○	○
Lack of funds for transportation of students to work sites	○	○	○
Lack of curriculum materials that meet identified needs	○	○	○
Lack of curriculum materials that meet staff development needs	○	○	○
Lack of competent person(s) to train staff	○	○	○
Opposition from parents	○	○	○
Confusion between Career Education and Vocational Education	○	○	○
Lack of interest at the State educational agency	○	○	○
Lack of interest in the business/labor/industry community	○	○	○
Other ______ please specify	○	○	

35. Please rate the **priority** of each of the following actions (which might be undertaken by your State or the Federal government) in terms of your School District's Career Education needs? (Please check one in each row.)

	High	Medium	Low	Should not be done
Support development and validation of Career Education curriculum materials	○	○	○	○
Facilitate dissemination of information about existing Career Education materials	○	○	○	○
Subsidize purchase of Career Education materials by school districts	○	○	○	○
Support in-service staff development activities	○	○	○	○
Support innovations in pre-service training	○	○	○	○
Support a computerized career information network	○	○	○	○
Support research to predict future job markets	○	○	○	○
Support research to improve career guidance procedures	○	○	○	○
Provide incentives for participation by the private sector	○	○	○	○
Other (please specify) ______	○	○		

36. With which of the following are you acquainted? (Please check **all** that apply.)

○ **An Introduction to Career Education**, a policy paper of the U.S. Office of Education

○ The National Advisory Council for Career Education

○ Office of Career Education, in the U.S. Office of Education (Dept of HEW)

○ Public Law 93-380, Section 406

○ State legislation enacted with regard to Career Education

○ State Coordinator for Career Education

○ Any federally assisted Career Education programs (Please list locations or names of one or more.)

______

______

______

37. Please rate the importance of each of these Career Education **student outcomes** as viewed by your **school district**. (Please check one in each row.) In items j-l, space is left for writing in other Career Education outcomes viewed as **important** by your district.

	Schools should help students have:	Absolutely necessary	Impor-tant	Good if time is avail-able	Not an appropriate goal for schools
a.	The basic academic skills required for adaptability in our rapidly changing society.	○	○	○	○
b.	Good work habits.	○	○	○	○
c.	A personally meaningful set of work values that foster a desire to work.	○	○	○	○
d.	Career decision-making skills, job-hunting skills, and job-getting skills.	○	○	○	○
e.	Vocational skills sufficient to gain entry into and attain a degree of success in the occupational society.	○	○	○	○
f.	Made career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.	○	○	○	○
g.	An awareness of means available for continuing and recurrent education after leaving the formal school system.	○	○	○	○
h.	Success in being placed in a paid occupation, in further education, or in a vocation consistent with their current Career Education.	○	○	○	○
i.	Work values incorporated into their total personal value structure in such a way that they are able to choose what, for them, is a desirable lifestyle.	○	○	○	○
j.					
k.					
l.					

38. Which of the following are descriptive of your district's efforts to provide experiences that will enable students to learn about and prepare for work as a part of their way of living? (Please check all that apply.)

○ Efforts are based on the Career Education guidelines of the U.S. Office of Education.

○ Efforts are similar to the definition given at the beginning of this questionnaire, but not based directly on federal guidelines.

○ Efforts are controversial within the district.

○ Activities have been carried out by vocational educators and guidance counselors for some time now.

○ Efforts represent a grass roots response by many staff members to the need to improve the quality of our schools.

○ Efforts are now limited but may increase as the gains brought about by the current Career Education movement become apparent.

39. (optional) What, in your opinion, is likely to be the future of career education in your school district?

40. (optional) Please record any ideas on Career Education that you would like to see presented in a report to Congress.

Table B-1

Materials Most Frequently Recommended by School District (Q9)

Material	Producer	No. of times recommended
Occupational Outlook Handbook	U.S. Department of Labor	70
"Guidance Associates Series"	Guidance Associates	46
"SRA Materials"	Science Research Associates (SRA)	37
Bread and Butterflies	Agency for Instructional Television/Nat'l. Inst. Television	36
DUSO Kit	American Guidance Service	25
Career World (magazine)	Curriculum Innovations	25
Vital Information for Education and Work (VIEW)	Chronicle Guidance	24
"Chronicle Career Materials"	Chronicle Guidance	21
"McKnight Career Education Publications"	McKnight	21
Dictionary of Occupational Titles	Manpower Development	16
"SRA Career Brief File"	SRA	14
"Valuing Approach to Career Education" Series	Educational Achievement Corporation	14
"Counselor Films, Inc." (CFI)	Counselor Films, Inc.	12
Widening Occupational Roles Kit (WORK)	SRA	12
Occupational Exploration Kit	SRA	12
"Pennscript"	Pennscript	10
"Singer/SVE Career Filmstrips"	Singer/Society for Visual Education	10
"CISI" or "CIS" (Career Information System)	University of Ohio	9
"Deciding" and "Decisions & Outcomes"	CEEB/ETS	9
"Eye Gate Materials"	Eye Gate	9
"Succeeding in the World of Work"	McKnight	9
"Career Education Program Series"	Houghton Mifflin	9
"Popeye Comic Series"	King Features	8
"Largo Materials"	Largo, Florida	8
Focus on Self-Development	SRA	8
"Houghton Mifflin Career Education Program"	Houghton Mifflin	7
"Career Information Kit"	SRA	7
Ohio Vocational Interest Survey (OVIS)	Not specified	7
"World of Work"	Not specified	7
W.I.S.C. Program (Wisconsin Information System for Counselors)	Wisconsin Department of Public Instruction	6
"U.S. Department of Labor"	U.S. Department of Labor	6
Job-O Career Survey	Not specified	6
Self-Directed Search Interest Inventory	Holland	6

Note. 276 materials were recommended fewer than 6 times.

APPENDIX C

Survey Instrument for State Education Agencies

This survey instrument was developed by the American Institutes for Research in cooperation with the Council of Chief State School Officers, the National Advisory Council for Career Education, and the U.S. Office of Education, and was used to assess the status of career education in the States. The responses are displayed in the tables immediately following the questionnaire, and these results are summarized and discussed in Chapter 4.

A. Who should fill out this questionnaire?

We ask that the person most familiar with career education programs and/or activities ongoing in the state be responsible for responding to this survey. Please indicate the name, position, and state served by this individual on the lines provided below.

____
Name of Respondent

____
Position

____
State Served

B. What information is being requested?

The ten questions on the questionnaire pertain to several dimensions of career education that can be related directly to State Education Agency activities. The information is intended to provide an overall picture of career education in the states, and each state's responses will remain confidential. Published data will be aggregated over all states. We hope, therefore, you will feel free to describe both successes and shortcomings of career education in your state.

All questions may be answered by blackening the appropriate circles, except for the few which require the respondent to fill in a blank. Either pencil or pen may be used.

C. What is the meaning of "career education" as used in the questionnaire?

The term "career education" refers to a comprehensive, innovative reform of the United States public school system begun in the late 1960's and early 1970's. This innovation is based on the belief that one of the fundamental objectives of schools is to provide experiences through which students can learn about and prepare to engage in work as part of their way of living.* Accordingly, all students are to be taught basic academic skills; equipped with good work habits; made capable of choosing personally meaningful work values; equipped with career decision-making and job-getting skills, and with entry level vocational skills; made aware of available means for continuing education, and made capable of incorporating work values into their total value structure in such a way as to achieve a desirable lifestyle.

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*U. S. Office of Education, An Introduction to Career Education, A Policy Paper of the U. S. Office of Education, 1975.

Career education has objectives that are related to the objectives of many vocational education programs across the country. Yet it goes beyond those vocational education programs that focus specifically on providing job skills to selected individuals. Career education is concerned with relationships between education and all work--paid or unpaid--that an individual does; career education is concerned with the complete process of career development, beginning in the preschool years and continuing through all of life; and career education is concerned with all students, from kindergarten through graduate college.

Career education is a complex concept, encompassing the efforts of diverse individuals across the country. Thus, each state has or will formulate its own unique definition of career education. It is not our purpose here to recommend a single definition, but merely to provide a framework for responding to this questionnaire.

1. For the school year 1974-75, what was the total amount spent by the State Education Agency on career education?

1974-75: $__________

This figure (check all that apply):

○ includes the total amount spent on education by the state

○ includes the total amount spent on vocational education by the state

○ includes part of the amount spent on vocational education by the state

○ includes a state appropriation specifically for career education of $______

○ includes funds for SEA staff and expenses

○ includes funds for assisting LEA's with career education (other than SEA staff and agency expenses)

○ is only an approximate figure since funding information is not compiled separately for career education

○ includes $______ in state-appropriated funds

○ includes $______ in Federal funds

2. What were the two principal sources of funds spent on career education in 1974-75 (not including the teaching of specific skills, i.e. vocational education)?

(1) ______________________________

(2) ______________________________

3. What is the status of state legislation concerning career education in your state?

○ Legislation specifically for career education was passed in 19____

○ Legislation specifically for career education is being considered at the present time

○ No legislation for career education is being considered at present

○ Career education is being conducted under existing legislative mandates

4. Has your state adopted, or does it plan to adopt, a formal written policy with regard to career education (NOT a formal written policy on vocational education only)?

○ Yes

○ No

Adopted in the 19____ - ____ school year.

If possible, please return a copy of this policy statement with the questionnaire.

(Please check all that apply)

○ Includes specific student outcome objectives

○ Includes a plan for organizing career education activities

○ Includes a plan for evaluating career education activities

(Please check all that apply)

○ Due to insufficient interest in career education

○ Due to insufficient funds available for career education

○ Due to lack of consensus on what the goals of career education should be

○ Due to priority of other pressing problem areas over career education:

____
please specify one such area

○ Due to the success of career education activities without a formal written plan

○ Due to the fact that the description of career education, as presented in this questionnaire, was considered and rejected

○ Other ____________________________
please specify

5. Does your state have a formally constituted Advisory Committee for Career Education?

○ Yes

○ No

Please check all that serve on the committee.

SEA representatives:

- ○ Career education staff
- ○ Vocational education staff
- ○ Other state agency staff

College or university representatives:

- ○ Four-year college or university
- ○ Two-year college
- ○ Proprietary school
- ○ Other postsecondary school

Local school district representatives:

- ○ Guidance counselors
- ○ School administrators
- ○ Vocational education teachers
- ○ Other teachers

○ Business/labor/industry/professional representatives

○ Other

How many members of the committee are there? ______

How often does the committee meet?

____

(Please check all that apply)

○ But there is a Departmental Task Force on Career Education

○ But there is an Advisory Committee for Vocational Education which considers the topic area

○ But there is an Advisory Committee for Curriculum which considers the topic area

○ Other ______________________________
please specify

6. Were individuals employed by your state education agency during the 1974-75 school year *solely* for work in career education?

○ Yes

○ No

(Please check all that apply)

○ including ______________ full-time individuals
(number)

○ including ______________ part-time individuals
(number)

○ including mostly vocational education representatives

○ including mostly guidance and counseling representatives

The person now responsible for coordinating and/or implementing career education at the state level has experience primarily in

○ Guidance and counseling

○ School/college administration

○ Vocational education curriculum and instruction

○ Non-vocational education curriculum and instruction

○ Business/labor/industry/professional community

○ Other ____
please specify

(Please check all that apply)

Those individuals (both part-time and full-time) at the state level who are responsible for establishing and/or maintaining career education programs or projects are:

○ Vocational education curriculum and instruction representatives

○ Non-vocational education curriculum and instruction representatives

○ Guidance and counseling representatives

○ Other state staff ______________________________
please specify

○ Individuals other than state staff:

____
please specify

7. Were formal evaluations of Local Education Agency career education activities carried out by your state education agency during 1974-75?

○ Yes

If possible, please return report(s) with the questionnaire.

(Please check all that apply)

○ Using standardized tests of career development

○ Using expert judgments

○ Using teacher ratings

○ Using students' ratings while in school

○ Using students' ratings a year or more after school

○ Using a special state evaluation team

○ Using standardized tests of basic skills

○ Using expressed attitudes of persons in communities (e.g., newspaper editorials, PTA notices)

○ Other ______________________________ please specify

○ No

(Please check all that apply)

○ But one is planned

○ There are insufficient funds to conduct an evaluation

○ There is no need for an evaluation now

○ But informal evaluations were made

8. Is any state-level assistance provided to local education agencies for either establishment or maintenance of career education programs or projects?

○ Yes

○ No

Please indicate those modes of assistance that were used in 1974-75 with local education agencies to either establish or maintain career education programs or projects. (Mark as many as apply)

○ On-site visits
○ State meetings
○ Newsletters, bulletins
○ Locally held workshops
○ Consultants on demand
○ Other ______________
please specify

Please rate the level of emphasis placed upon the following types of assistance to Local Education Agencies by your state education agency. (Check one circle for each item)

		Level of Emphasis		
		High	Medium	Low
a.	Development and validation of career education curriculum materials	○	○	○
b.	Discemination of information about existing career education materials	○	○	○
c.	Purchase of career education materials for school districts	○	○	○
d.	In-service staff development	○	○	○
e.	Pre-service staff development	○	○	○
f.	Research for predicting future job markets	○	○	○
g.	Research for improving career guidance procedures	○	○	○
h.	Incentives for participation by the private sector	○	○	○
i.	Provision of occupational information (e.g. CVIS)	○	○	○
j.	Other (please specify) ______________ ______________	○	○	○

(Please check all that apply)

○ But assistance is provided to vocational education programs or projects

○ But assistance is provided to stimulate the development of innovative programs

9. Please rate the priority of each of the following actions, which might be undertaken by the federal government, in terms of your State Education Agency's career education needs. (Please check one in each row)

	High	Medium	Low	Should not be done
a. Support development of career education curriculum materials	○	○	○	○
b. Support research into job market trends and predictions	○	○	○	○
c. Support development of local school district staff	○	○	○	○
d. Support development of pre-service teacher training programs	○	○	○	○
e. Provide incentives for participation by the private sector	○	○	○	○
f. Provide avenues for increased communication of innovative techniques for career education	○	○	○	○
g. Provide a unifying leadership for career education activities throughout all States	○	○	○	○
h. Other ____________________ please specify ____________________	○	○		

10. Please use the space below either to add information about career education activities and programs ongoing in your state or to indicate any problems encountered in answering specific questions on this survey form.

____

____

____

____

Table C-1

Funding Levels, Source, and Coverage - 1975

					Includes				
State	Total	Specific to career ed.	State appropriated	Federal	Total amount spent on vocational ed.	Partial amount spent on vocational ed.	Funds for SEA staff and expenses	Funds for assisting LEA's with career ed.	Is only approximate figure
Alabama	51,600					X	X		X
Alaska	500,000[a]		145,000[a]	355,000				X	
Arizona		4,789,800					X	X	
Arkansas	368,618	51,354	89,354	269,264			X	X	
California	1,180,394			1,180,394		X	X	X	X
Colorado	280,000			230,000[b]			X		X[c]
Connecticut	323,000			323,000				X	
Delaware	184,440					X		X	X
Florida	4,835,000	4,835,000[d]						X	
Georgia	1,111,799		276,450	835,349		X			
Hawaii	127,515	100,000		27,515				X	
Idaho	--[e]								
Illinois	3,000,000			2,000,000			X		X
Indiana	1,000,000			200,000		X	X	X	X
Iowa					X			X	X
Kansas	264,443			264,443		X			
Kentucky	--[f]								
Louisiana	6,000,000[g]	6,000,000	6,000,000				X	X	
Maine	60,000			60,000					X
Maryland	100,000								X
Massachusetts	750,000								X
Michigan	815,000	15,000	415,000	400,000			X	X	X
Minnesota	35,500							X	
Mississippi	1,047,408		326,132	615,644		X	X	X	
Missouri	550,000		350,000	200,000			X		X
Montana	7,300			7,300					
Nebraska	300,000			300,000				X	
Nevada	264,259			264,259		X	X	X	
New Hampshire	100,000			100,000		X	X	X	X
New Jersey	2,058,000		2,058,000				X	X	
New Mexico	148,000	16,000	16,000	132,000			X		X
New York	1,000,000+			1,000,000+					X
North Carolina	100,000								X
North Dakota	60,000	60,000		60,000		X		X	
Ohio	4,000,000		2,500,000	1,500,000				X	
Oklahoma	128,000					X			
Oregon	125,000		25,000	100,000		X	X	X	X
Pennsylvania	0								
Rhode Island	288,000			288,000		X			
South Carolina	167,863		8,974	156,763		X	X	X	
South Dakota	200,000								X
Tennessee	229,379		31,379	198,606		X			
Texas	318,000						X		
Utah	190,000	30,000	60,000	130,000		X	X	X	
Vermont	432,000	50,000	100,000	332,000			X	X	
Virginia	918,625	253,814	863,647	54,978		X	X		
Washington	446,000	50,000		396,000					
West Virginia	390,866[b]							X	X
Wisconsin	1,007,000			1,007,000		X	X	X	
Wyoming	274,000			104,500		X	X		X
Totals	35,413,509	16,250,968	13,264,936	13,504,756	1	19	23	26	20

a. Federal and State funds authorized for expenditure during FY1975. Since LEA's have the option of assigning State Foundation Funds for local priorities and needs, this figure could be higher. However, there is no way at present the SEA can determine this figure or have the LEA's separate from other expenditures.
b. ESEA Title III funds.
c. Vocational education--separate agency
d. This amount was given directly to LEA's in Florida.
e. It is impossible to determine this figure because of overlapping funds and the manner in which LEA's spend foundation program monies.
f. Not available at this time.
g. Vocational education is included in career education.

Table C-2

Two Principal Sources of Funds Spent on Career Education in 1974-75

State	Response
Alabama	No response
Alaska	1) Federal; 2) State
Arizona	1) Career education state funds
Arkansas	1) Vocational Education--Parts C, D, and I: 2) ESEA Title III
California	1) Vocational Education; 2) ESEA Title III & IV
Colorado	1) ESEA Title III; 2) Vocational Education, Part D and Exemplary Funds
Connecticut	1) Vocational Education Act, Part B; 2) Local School District appropriations
Delaware	1) Matching allocations from Part D project
Florida	1) State dollars allocated by the State Legislature
Georgia	1) Vocational Education; 2) Title III State appropriations
Hawaii	1) State funds--special appropriation; 2) Federal funds--Vocational Education Act P.L. 90-576
Idaho	
Illinois	1) local funding; 2) Title Programs and Separate Vocational Programs labeled career education
Indiana	1) Federal (Career Education Grant); 2) Vocational Education (Part C-D & R&D)
Iowa	1) State & Federal Vocational Education Funding; 2) Title IV-ESEA
Kansas	1) Federal funds; local
Kentucky	1) Federal funds; 2) local monies
Louisiana	No response
Maine	1) Federal funds
Maryland	1) State Headquarters funds (workshops, publications, salaries & expenses); 2) Voc. Ed. Part D funds
Massachusetts	1) State; 2) local
Michigan	1) General Education--State funds; 2) State Administrative funds
Minnesota	1) 75% from Vocational Federal funds; 2) 25% from State approved funds
Mississippi	1) State Minimum Foundation; 2) Appalachian Regional Commission
Missouri	1) State appropriation out of vocational education; 2) Federal Part D--Part C--Career Ed. money
Montana	1) Title III
Nebraska	1) Vocational Education Amendments; 2) ESEA Title III
Nevada	1) Vocational Education Act Amendments--Exemplary; 2) Title III
New Hampshire	
New Jersey	1) VEA Federal funds; 2) State annual budget
New Mexico	1) Part D, Vocational Funds (Federal)
New York	1) Vocational Education; 2) EDPA
North Carolina	1) ESEA Title III
North Dakota	1) Federal Part D
Ohio	1) State funds; 2) Federal Vocational funds
Oklahoma	
Oregon	1) Vocational Education Funds, Parts C & D; 2) EPDA, Part F
Pennsylvania	Not applicable
Rhode Island	1) Local Education Agencies
South Carolina	1) P.L. 90-576, Part D, Section 142d; 2) P.L. 90-576, Part C, Section 131b
South Dakota	1) Vocational Education Amendments; 2) ESEA Title III
Tennessee	Not applicable
Texas	1) Title V; 2) Title III ESEA
Utah	1) Vocational Education; 2) State appropriation
Vermont	1) Vocational Exemplary and Research--Part C and D--USOE; 2) State fonds
Virginia	1) Two demonstration projects; 2) exploration programs
Washington	1) USOE grant & NIE grant; 2) The figure reported represents money designated solely for career education--there is a lot of money being spent in other areas.
West Virginia	1) Vocational (Part D) Exemplary; 2) Title III
Wisconsin	1) VEA; 2) ESEA Title III
Wyoming	1) Special Education funds; 2) State Department fund

Table C-3

Status of Legislation on Career Education

State	Year legislation passed	Being considered at present time	Not being considered at present time	Considered under existing legislative mandates
Alabama		X		
Alaska			X	
Arizona	X			
Arkansas	1975			X
California			X[a]	X
Colorado	1975			
Connecticut		X		
Delaware			X	
Florida	1974			
Georgia				X
Hawaii			X	X
Idaho			X	X
Illinois		X		
Indiana			X	
Iowa				
Kansas	1974			
Kentucky		X		
Louisiana	1973	X		
Maine			X	
Maryland		X		
Massachusetts			X	X
Michigan	1974			X
Minnesota		X		X
Mississippi		X		
Missouri			X	
Montana		X		
Nebraska			X	
Nevada			X	
New Hampshire			X	
New Jersey	1969			X
New Mexico			X	
New York			X	X
North Carolina			X	
North Dakota		X		X
Ohio				X
Oklahoma		X		
Oregon				X
Pennsylvania		X		
Rhode Island			X	
South Carolina			X	
South Dakota			X	
Tennessee				X
Texas			X	
Utah				X
Vermont			X	X
Virginia				X
Washington	1973 & 1975			
West Virginia			X	
Wisconsin			X	
Wyoming		X		
Totals	9	13	22	17

[a] Will be incorporated into Legislative packages, reform of intermediate and secondary education.

Table C-4

Adoption of Formal Written Policy on Career Education

			Includes				Due to						
State	Yes	Year of adoption	Specific student outcomes	Plan for organizing C.E. activities	Plan for evaluating C.E. activities	No	Insufficient interest	Insufficient funds	Lack of consensus on goals	Priority of other problems	Success of C.E. activities without formal plan	C.E. presented in this questionnaire considered and rejected.	Other
Alabama	X	1971		X									
Alaska	X	1975	X										
Arizona	X	NR											
Arkansas	X	1973		X									
California						X[a]							
Colorado	X	1972		X									
Connecticut	X	1972											
Delaware	X	1976	X										
Florida	X	1973											
Georgia	X	1975		X	X								
Hawaii	X[b]	1972	X	X									
Idaho	X	1972											
Illinois	X[c]												
Indiana	X	1974											
Iowa	X	1972	X										
Kansas	X	1972	X										
Kentucky	X[d]	1975	X	X	X								
Louisiana	X	1973	X	X	X								
Maine	X[e]	1976		X	X								
Maryland	X	1971	X	X	X								
Massachusetts						X				X[f]			
Michigan	X	1974	X	X									
Minnesota	X	1972	X	X									
Mississippi	X[g]		X	X	X	X							
Missouri	X	1972		X									
Montana	X	NR	X	X	X								
Nebraska	X	1976	X	X	X								
Nevada	X	1972											
New Hampshire	X	1973											
New Jersey						X				X			X[h]
New Mexico	X	1973											
New York[i]			X	X	X								
North Carolina	X	1972		X									
North Dakota	X	1976	X	X									
Ohio	X	1972	X	X	X								
Oklahoma	X	1975	X	X	X								
Oregon	X	N.A.		X	X								
Pennsylvania						X			X				
Rhode Island	X[j]			X	X								
South Carolina	X	1974	X										
South Dakota						X					X		
Tennessee	X[k]		X	X	X								
Texas	X	1972	X	X	X								
Utah	X	1972	X	X	X								
Vermont						X					X		
Virginia	X	1973											
Washington	X	1975[l]		X									
West Virginia	X[m]												
Wisconsin						X[n]					X		X
Wyoming	X[g]		X	X	X	X							
Totals	42[o]	35[p]	22	27	17	9			1	2	3		2

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[a] Career education remains in formulating stage. Is being incorporated.

[b] Hawaii has more of a "plan" than a policy," but it was formally adopted by the board; present policies include C.E. as one part of the school's total program.

[c] Now being developed.

[d] The Kentucky State Board of Education endorsed State plan on 15 December 1975.

[e] Maine plans to adopt in the 1976 school year--under consideration now.

[f] Career guidance has higher priority.

[g] Adoption is pending.

[h] Implemention of thorough and efficient mandate has priority. There has been State funding for career development since 1970. As of 12/8/75, action is pending on a State plan for C.E. as per PL93-380, Sect. 406

[i] Plan to be developed in 1976-77.

[j] Plans to adopt in 1977-78.

[k] Plan to be developed in 1976-77.

[l] Washington had a program in 1973 but changed it.

[m] Draft.

[n] Wisconsin plans to submit a proposal for developing a State plan for C.E.; this will include a policy statement.

[o] Total number of States that have or are preparing to adopt.

[p] Number of States that have adopted (those pending excluded).

Table C-5

Existence of Formally Constituted Advisory Committee for Career Education

		Committee Representation: State Education Agency			College/ University				Local Education Agency												
State	Yes	C.E. staff	V.E. staff	Other State agency staff	4-year	2-year	Proprietary	Other post-secondary	Guidance counselors	Administration	V.E. teachers	Other teachers	Business	Other	No. of members	Meeting Schedule	No	Department Task Force exists	V.E. Advisory Committee considers area	Curriculum Advisory Committee considers area	Other
Alabama	X	X	X	X	X	X			X	X	X	X	X		21	Quarterly					
Alaska	X		X	X		X			X	X	X	X	X	X	12	Inactive until first quarter 1976[a]					
Arizona	X	X	X	X	X					X			X	X	12	At least twice a year					
Arkansas																	X	X			
California																	X	X	X	X	
Colorado	X	X	X	X	X				X	X	X	X	X	X	23	6 meetings/hr. by law					
Connecticut																	X		X		
Delaware	X			X	X	X				X	X		X		27	Monthly					
Florida																	X	X	X		
Georgia																	X	X			
Hawaii	X	X	X	X	X	X	X	X	X	X			X	X	23	As needed					
Idaho																	X				
Illinois																	X	X	X		
Indiana	X	X	X	X					X	X	X	X	X	X	30	4 times a year					
Iowa	X	X								X	X		X		11	Monthly					
Kansas																	X	X	X		
Kentucky	X	X	X	X											18	Monthly, Jan.-Oct.					
Louisiana	X	X		X	X	X	X	X	X	X		X	X		45	Twice a year					
Maine	X[b]	X	X	X	X				X	X	X	X	X	X	Up to 15	To be established after adoption					
Maryland																	X	X	X		
Massachusetts																	X				X[c]
Michigan	X	X			X	X			X	X	X	X	X	X	20	Monthly					
Minnesota																	X	X	X[b]		
Mississippi	X	X	X	X											7	Monthly					
Missouri																	X		X		X[d]
Montana																	X				X[e]
Nebraska																	X	X			X[f]
Nevada																	X	X			
New Hampshire																	X				X[g]
New Jersey																	X		X		
New Mexico																	X				
New York	X				X				X	X		X			14	3 to 4 times a year					
North Carolina																	X	X[h]			
North Dakota																	X		X		
Ohio																	X	X	X		
Oklahoma																	X	X	X		
Oregon																	X	X	X		
Pennsylvania																	X		X		
Rhode Island																	X		X		X[i]
South Carolina																	X	X			
South Dakota																	X				X[j]
Tennessee																	X	X			
Texas	X	X			X	X	X		X	X	X	X	X		21	No set schedule--usually twice a year					
Utah																	X	X			X[k]
Vermont																	X	X	X	X	
Virginia																	X	X			
Washington	X												X		13	5 times a year					
West Virginia																	X	X	X		
Wisconsin	X	X	X	X	X	X		X	X	X	X	X	X	X	35	As needed					
Wyoming	X	X	X	X	X				X	X	X	X	X	X	15	Once a month					
Total	18	14	11	13	12	8	3	3	12	15	11	11	15	9			32	20	17	2	8

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[a] Originally once each quarter.

[b] Pending adoption.

[c] Advisory Committee will be appointed.

[d] Department Task Force--not active at present.

[e] Plan to form State advisory group.

[f] C.E. has taken up residence on all other Department Priority Task Forces.

[g] Advisory Committee for Statewide Federally-funded project.

[h] Departmental Steering Committee.

[i] Career Education Association.

[j] In 1972-73.

[k] Director of General Services.

Table C-6
Individuals Employed by State Education Agency Solely for Work in Career Education - 1974-75

		Including				Experiential background of person(s) coordinating career education at state level							Position of person responding for career education program				
State	Yes	Number full-time	Number part-time	Mostly voc. ed. representatives	Mostly guidance & counseling reps.	Guidance & counseling	School/college administrator	Voc. ed. curr. & instruction	Non-voc. ed. curr. & instruction	Business/labor/industry/prof.	Other	No	Voc. ed. curr. & instruction	Non-voc. ed. curr. & instruction	Guidance & counseling	Other state staff	Persons other than state staff
Alabama	X	1			X		X		X	X							
Alaska												X	X	X	X		
Arizona	X	8	12							X	X[a]						
Arkansas	X	1	1						X								
California	X	10	1		X	X	X	X	X	X	X[b]						
Colorado	X	1	1				X			X	X[c]						
Connecticut												X			X	X[d]	X[e]
Delaware												X	X				
Florida	X	2	15			X											
Georgia												X	X	X	X	X[f]	
Hawaii												X	X	X	X	X[g]	X[h]
Idaho												X	X	X	X		
Illinois	X	1	5						X								
Indiana												X	X		X	X[i]	
Iowa	[no response]																
Kansas												X	X		X		
Kentucky	X	1				X	X		X	X							
Louisiana	X	17				X	X	X	X								
Maine	X	1				X			X		X[j]						
Maryland												X	X		X		
Massachusetts												X	X		X		X[k]
Michigan	X	4	8					X	X								
Minnesota												X	X		X		X[l]
Mississippi												X	X		X		
Missouri	X	1	1			X			X								
Montana												X					
Nebraska	X	1			X	X											
Nevada												X	X	X	X		
New Hampshire	X	1	1			X	X										
New Jersey	X	3						X									
New Mexico	X	2					X										
New York												X	X	X	X	X[m]	
North Carolina												X				X[n]	
North Dakota	X	2				X			X								
Ohio	X	2		X		X		X	X								
Oklahoma	X	1	2	X	X	X		X									
Oregon												X	X	X	X	X[o]	X[p]
Pennsylvania												X					
Rhode Island	X	1						X									
South Carolina	X	1							X								
South Dakota												X	X	X	X		
Tennessee												X	X		X		
Texas												X	X	X	X	X[q]	
Utah	X	4				X											
Vermont	X	2				X	X	X	X								
Virginia	X	2									X[r]						
Washington	X	1															
West Virginia	X	1		X				X									
Wisconsin	X	2	1			X			X	X							
Wyoming	X	1	40			X	X	X	X	X							
Total	28	75[s]	88[t]	3	4	15	9	10	15	7	5	21	17	9	17	8	5

[a] Educational administration
[b] Total range of curriculum areas
[c] Curriculum, teacher training
[d] State Consultant for Vocational Education
[e] Regional C.E. Resource Center personnel
[f] Title III personnel
[g] Teacher education institutions
[h] Contract services of private firm
[i] Curriculum consultant
[j] Classroom teaching, K-16
[k] Consultants
[l] Cadre of teacher-training staff
[m] Research
[n] Combined with duties of coordinator
[o] Dissemination
[p] Regional coordinators
[q] Program development
[r] Position vacant at present time
[s] 28 states, 75 persons
[t] 12 states, 88 persons

Table C-7

Evaluation of Local Education Agency Career Education Activities Carried Out by State in 1974-75

State	Yes	Criteria: Standardized tests of career development	Expert judgment	Teacher ratings	Ratings by students in school	Ratings by students a year or more after school	State evaluation team	Standardized tests of basic skills	Attitudes of community members	Other	No	Evaluation is planned	Insufficient funds to evaluate	No need	Informal evaluations made
Alabama	X	X		X			X		X						
Alaska	X[a]		X				X				X[a]			X	
Arizona	X	X	X	X	X	X			X						
Arkansas											X	X			
California	X	X	X	X	X	X		X	X	X[k]					
Colorado	X	X	X	X	X	X	X	X	X	X[b]					
Connecticut	X						X								
Delaware	X		X												
Florida											X	X			X
Georgia	X	X	X	X	X		X	X							
Hawaii	X	X	X	X	X		X								
Idaho	X									X[c]					
Illinois															
Indiana	X		X												
Iowa	X[d]		X	X	X		X		X	X[e]	X[d]		X		X
Kansas	X									X[n]					
Kentucky	X		X	X	X		X		X						
Louisiana	X		X	X	X		X		X						
Maine											X	X	X		
Maryland											X				X
Massachusetts											X	X			
Michigan	X		X	X	X		X		X						
Minnesota	X	X		X	X	X	X	X	X	X[f]					
Mississippi	X	X	X	X	X	X	X		X						
Missouri	X									X[g]					
Montana											X	X	X		
Nebraska											X				X
Nevada											X		X		
New Hampshire											X		X		X
New Jersey											X				X
New Mexico	X									X[h]					
New York											X				X
North Carolina											X		X		
North Dakota															
Ohio	X	X	X	X	X	X	X		X	X[i]					
Oklahoma	X						X								
Oregon	X		X			X	X		X	X[o]					
Pennsylvania											X[p]				
Rhode Island	X	X		X			X			X[k]					
South Carolina	X	X													
South Dakota											X		X		
Tennessee											X				X
Texas											X		X		
Utah	X	X								X[j]					
Vermont	X		X	X	X		X	X							
Virginia											X				
Washington											X	X			
West Virginia	X	X			X			X		X[k]					
Wisconsin	X		X							X[l]					
Wyoming	X[m]									X	X[l]	X			
Totals	30	13	17	15	14	7	17	6	12	15	21	7	8	1	8

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[a] A qualified "yes" that pertains primarily to Title III activities.

[b] On-site evaluation teams composed of various representatives of the community.

[c] Evaluations of Federal Title III projects and Vocational Education C and D--available in our office.

[d] More thorough evaluation is in "think through" state.

[e] Third party evaluations of pilot demonstration projects.

[f] Under direction of the research coordinating unit.

[g] State form seeking certain types of information.

[h] Criterion-referenced tests on a sampling basis.

[i] Thirty programs--7 were involved in a state-wide assessment that dealt with the development of a field-based C.E. test at grades 3, 6, 8, 10; 23 were involved in third-party evaluations.

[j] Using locally-developed items as part of the state assessment effort.

[k] Third party evaluations.

[l] Monthly on-site visitations by D.P.I. and BVTAE consultants to 2 K-adult projects; third party evaluators used various instruments.

[m] Current activities limited.

[n] Third party with state input.

[o] Using State-developed assessment guide.

[p] Lack of interest.

Table C-8

State Level Assistance Provided to Local Education Agencies for Either Establishment or Maintenance of Career Education Programs or Projects

State	Yes	Types of Assistance						Level of Emphasis on Various Types of Assistance										But Assistance Provided		
		On-site visits	State meetings	Newsletters, bulletins	Locally-held workshops	Consultants on request	Other	Development and validation of materials	Dissemination of information about C.E. materials	Purchase of materials for districts	Inservice staff development	Preservice staff development	Research to predict job market	Research to improve career guidance procedures	Incentives for participation by private sector	Provision of occupational information	Other	No	To vocational education programs or projects	To stimulate development of innovative programs
Alabama	X	X	X	X	X	X	X[r]	H	H	H	H	M	M	H	L	H				
Alaska																		X	X	X
Arizona	X	X	X	X		X		H	H	M	H	L	L	H	H	M	M[a]			
Arkansas	X	X	X		X	X	X[b]	H	H	M	H	L	L	L	L	L				
California	X	X	X	X			X[a]	H	H	L	H	M	H	H	L	H	?[t]			
Colorado	X	X	X	X	X	X		H	H	L	H	M	M	H	M	M				
Connecticut	X	X	X	X	X	X	X[c]	M	M	M	H	M	M	H	L	H				
Delaware	X	X			X			L	L	L	L	L	L	L	L	L				
Florida	X		X	X	X	X		M	H	H	H	M	M	H	M	M				
Georgia	X	X	X	X	X	X	X[d]	L	M	L	H	M	L	H	L	M				
Hawaii	X	X	X		X	X	X[e]	H	H	H	H		L	L	H	H				
Idaho	X	X	X		X	X		M	M	L	M	L	L	M	L	H				
Illinois	X	X	X		X	X		M	M	L	H	H	M	L	M	M				
Indiana	X	X	X		X	X	X[f]	H	M	L	H	M	L	M	L	L				
Iowa	X	X	X	X	X	X	X[g]	M	H	L	H	M	H	H	L	H	?[h]			
Kansas	X	X	X	X	X	X		H	H	M	H	M	M	M	H	M				
Kentucky	X	X	X	X	X	X		M	M	L	H	H	H	M	M	M				
Louisiana	X	X	X	X	X	X	X[y]	H	M	H	M	M	M	M	L	M				
Maine	X	X			X	X		L	L	L	L	L	M	M	M	M				
Maryland	X	X	X		X	X		L	M	M	H	L	L	H	M	H				
Massachusetts																		X	X	
Michigan	X	X	X	X	X	X	X[i]	H	M	L	H	M	H	M	M	H				
Minnesota	X	X	X		X	X		H	M	L	H	M	H	M	M	H				
Mississippi	X	X	X	X	X	X		M	H	H	H	L	M	M	H	H				
Missouri	X	X		X	X	X		M	H	M	H	L	M	L	L	M				
Montana	X	X			X			L	L	L	L	L	L	H	L	H				
Nebraska	X	X			X	X		M	H	L	M	L	L	M	L	M				
Nevada	X	X				X	X[j]	H		H	H			H		H				
New Hampshire	X	X	X	X	X	X		H	H	L	M	M	M	H	M	M				
New Jersey	X	X	X	X	X	X	X[k]	H	H	L	H	L	L	L	L	M	M[l]			
New Mexico	X				X	X	X[m]	M	M	H	H	L	L	L	M	H				
New York	X	X	X		X	X			H[v]											
North Carolina																		X	X	X
North Dakota																				
Ohio	X	X	X			X	X[n]	H	H	M	H	M	M	M	M	M				
Oklahoma	X	X			X			M	M	M	L	M	H	M	M	M				
Oregon	X	X	X	X	X	X		M	M	L	H	H	H	H	H	H[v]				
Pennsylvania																	X	X		
Rhode Island	X	X			X	X	X[w]	L	M	L	H	L	L	L	M	H				
South Carolina	X	X		X		X	X[o]	L	H	L	H	L	L	L	L	M				

See footnotes at end of table, p. 19.

Table C-8--Continued

State Level Assistance Provided to Local Education Agencies for Either Establishment or Maintenance of Career Education Programs or Projects.

State	Yes	Types of Assistance						Level of Emphasis on Various Types of Assistance										No	But Assistance Provided	
		On-site visits	State meetings	Newsletters, bulletins	Locally-held workshops	Consultants on request	Other	Development and validation of materials	Dissemination of information about C.E. materials	Purchase of materials for districts	Inservice staff development	Preservice staff development	Research to predict job market	Research to improve career guidance procedures	Incentives for participation by private sector	Provision of occupational information	Other		To vocational education programs or projects	To stimulate development of innovative programs
South Dakota																				
Tennessee	X					X								M		M	?[x]	X	X	X
Texas	X	X	X		X	X		H	M	M	H	M	L	M	M	M				
Utah	X	X	X		X	X		M	M	L	H	L	M	M	L	L	H[p]			
Vermont	X	X	X	X	X	X	X[q]	M	H	M	H	H	L	M	H	H				
Virginia	X					X		L	M		H	H	L	H	L	M				
Washington	X	X	X	X	X				M		H	L	H	M		H				
West Virginia	X	X	X		X	X		M	M	L	H	M	L	L	L	M				
Wisconsin	X	X	X	X	X	X		L	M	L	H	L	M	L	L	H				
Wyoming	X	X	X	X	X	X		L	L		H	H			M					
Total	44	40	32	22	37	39	17											5	5	3
High [H]								17	18	7	33	6	8	13	5	18				
Medium [M]								13	19	9	3	16	13	17	15	19				
Low [L]								10	4	23	4	17	18	11	19	4				

[a] Development of a local plan for implementing an articulated K-12 C.E. effort.

[b] Summer Institutes, Deparment of Education newsmagazine, miri-grants.

[c] Regional resource centers

[d] State-funded training programs

[e] Guides, instructional materials, etc.

[f] Publications, curriculum guide, guidance monograph, placement primer.

[g] State network of inservice development workshops.

[h] Orientation to concept forces on establishment of multi-discipline, multi-agency involvement for a 3-year implementation effort.

[i] State-held workshop.

[j] Technical assistance

[k] Country coordinators of C.E.

[l] Operation of computer-assisted career information network (19 terminals at LEA project sites)

[m] Regional workshops

[n] Curriculum inservice and director's handbook and guide.

[o] Workshops for one target region of State (20 districts)

[p] Assisting curriculum areas to identify where and how to fit existing C.E. materials into present curriculum (integration or infusion).

[q] Resource Agent Program (RAP)

[r] Print and nonprint materials loaned to teachers.

[s] Master trainer program

[t] Optional components into other departmental delivery systems.

[u] All other activities were developed locally.

[v] Funding developmental and demonstration projects.

[w] State-wide conference

[x] Vocational educationa and guidance provided some service on request.

[y] Annual Report

Table C-9

Priority of Actions That Might Be Undertaken by the Federal Government to Meet Some State Education Needs

State	Support				Provide				Comments
	Development of C.E. materials	Research in job market trends	Development of LEA staff	Development of preservice training	Incentives for participation by private sector	Avenues for increased communication of innovative techniques	Unifying leadership for C.E. activities throughout states	Other	
Alabama	H	H	H	H	M	H	H	H	Provide incentives for SEAs to maintain and expand C.E. staff. [Alabama]
Alaska	H	H	M	M	M	L	SN		
Arizona	SN	SN	M	H	H	L	L	H	Support of C.E. for postsecondary level. [Arizona]
Arkansas	M	H	H	M	H	M	M		
California	H	M	M	H	M	H	H		
Colorado	H	M	M	H	H	H	M	M	Staff development for SEA. [Colorado]
Connecticut	H	M	H	H	M	H	M		
Delaware	H	H	H	H	SN	M	H		
Florida	M	M	M	H	M	H	H		
Georgia	M	M	SN	SN	M	M	M		
Hawaii	H	H	H	H	M	M	L		
Idaho	M	L	H	H	M	M	M		
Illinois	M	M	H	H	M	H	H		
Indiana	H	L	H	H	M	L	H		
Iowa	H	M	H	H	H	M	H	H	Support development and improvement of curriculum management concept (development, dissemination, inservice, staff development, and assessment of outcomes) in local school district. [Iowa]
Kansas	H	M	H	H	H	M	H	H	
Kentucky	L	H	L	M	H	M	H		
Louisiana	H	M	H	H	M	H	H		Leadership training workshops. [Kansas]
Maine	H	H	H	H	M	H	H	H	Support development of resource centers for dissemination of materials. [Maine]
Maryland		H	SN	H	M	H	H		
Massachusetts	M	M	H	H	H	L	H		
Michigan	H	M	H	H	M	M	H		
Minnesota	H	H	M	L	M	M	M		
Mississippi	H	M	H	H	M	M	H		
Missouri	H	M	H	H	M	H	H		
Montana	H	H	H	H	H	H	H		
Nebraska	M	M	M	H	L	M	H		
Nevada	SN	H	H	M	M	H	H	H	Support of State Agency C.E. activities. [Nevada]
New Hampshire	L	M	H	H	H	H	H		
New Jersey	H	H	L	H	L	H	H	H	Provide uniform system for evaluation of SEA C.E. programs. [New Jersey]
New Mexico	M	M	H	H	H	H	M		
New York	M	H	M	H	L	H	H		
North Carolina	H	M	H	H	L	H	M		
North Dakota									
Ohio	H	H	H	H	H	H	H		
Oklahoma	H	M	M	H	H	H	H		
Oregon	M	H	L		M	H	M	H	Funding through State for developmental/demonstration projects. [Oregon]
Pennsylvania	H	L	M	M	H	H	M		
Rhode Island	H	H	H	H	H	H	H		
South Carolina	L	M	H	H	H	H	H		
South Dakota	M	L	H	H	M	M	H		
Tennessee	M	M	H	H	M	H	H		
Texas	H	H	H	H	H	H	H		
Utah	H	M	M	M	L	H	H	H	State plan and evaluation activities. [Utah]
Vermont	L	M	H	H	H	H	H	H	Implementation funding. [Vermont]
Virginia	H	H	H	H		H	H		
Washington	M	M	H	H	M	M	H		
West Virginia	H	H	M	H	M	M	H		
Wisconsin	M	H	H	H	H	H	M		
Wyoming	M	SN	H	H	L	H	H		
Totals									
High [H]	28	20	33	40	20	31	39	11	
Medium [M]	14	23	11	6	21	14	7	0	
Low [L]	4	4	3	1	6	4	7	0	
Should not be done [SN]	2	2	2	1	1	0	1	0	

APPENDIX D

Survey Instrument for Schools of Teacher Education

This survey instrument was developed jointly by the American Association of Colleges for Teacher Education (AACTE) and the American Institutes for Research in cooperation with the National Advisory Council for Career Education and the U.S. Office of Education. The survey of career education in teacher education was conducted by AACTE, and the results are summarized and discussed in Chapter 5.

OMB No. 51-S-75-014

Expiration Date 3-31-76
OE No. 439

SURVEY OF
CAREER EDUCATION
IN TEACHER EDUCATION
1975

CONDUCTED BY THE AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION
ONE DUPONT CIRCLE, WASHINGTON, D.C. 20036

in cooperation with

THE NATIONAL ADVISORY COUNCIL FOR CAREER EDUCATION

and the

OFFICE OF EDUCATION
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

and the

AMERICAN INSTITUTES FOR RESEARCH

INSTRUCTIONS

Please read the following questions and answers regarding procedure, *before* filling out the questionnaire.

1. WHO SHOULD COMPLETE THE QUESTIONNAIRE?

We ask that the AACTE Chief Institutional Representative be responsible for responding to the survey. However, in many cases, he or she may delegate the task of answering the questions to another faculty member who is most familiar with the School of Education's* activities in the area of career education. Please give the name and position of the respondent below and on the Acknowledgement Card supplied.

Primary responding individual: ______________________________

Position: ______________________________

2. WHAT INFORMATION IS BEING REQUESTED?

In Section I, questions concern Career Education activities of your School of Education at the preservice and inservice levels.

In Section II, questions concern the management of Career Education programs in your School of Education; these include financial support, research and development programs, and the ways activities and programs are developed, controlled and/or monitored.

In Section III, questions ask for your opinions concerning present Career Education needs and future directions.

3. HOW LONG DOES IT TAKE TO FILL OUT THE QUESTIONNAIRE AND WHAT IS THE DEADLINE?

Pretesting has indicated that it takes about 30 minutes to complete the questionnaire. The respondent may call (202) 293-2450, and ask for Mr. Robert Kaplan, for additional information or clarification.

Because of the short time available for completion of the survey analyses, questionnaires will be processed as they are returned. The processing schedule has been designed under the assumption that responses will be returned by December 20, 1975. We would, therefore, greatly appreciate your returning the completed questionnaire within the next three or four weeks. (An immediate response would, of course, be extremely welcome)

Please use either pen or pencil to indicate answers.

4. WHAT IS THE MEANING OF "CAREER EDUCATION" AS USED IN THE QUESTIONNAIRE?

The term "Career Education" refers to a comprehensive, innovative reform of the U.S. public school system begun in the late 1960's and early 1970's. This innovation is based on the belief that one of the fundamental objectives of schools is to provide experiences through which students can learn about and prepare to engage in work as part of their way of living.** Accordingly, all students are to be taught basic academic skills; equipped with good work habits; made capable of choosing personally meaningful work values; equipped with career decision-making and job-getting skills, and with entry level vocational skills; made aware of available means for continuing education, and made capable of incorporating work values into their total value structure in such a way as to achieve a desirable lifestyle.

Career Education has objectives that have been part of many vocational education programs across the country. Yet it goes beyond those vocational education programs that focus specifically on providing job skills to selected individuals. Career Education aims to provide students with decision-making skills for use in evaluating career options and an awareness of the opportunities for self-development in the world of work. It recognizes that all students will benefit from learning about careers and seeks to integrate career awareness into all curriculum subjects.

Career Education is a complex concept, encompassing the efforts of diverse individuals across the country. It is not our purpose here to recommend a single definition, but merely to provide a framework for responding to this questionnaire. The interest of this survey is in how teachers are trained to conduct Career Education programs in the schools.

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*"School of Education" is used here to denote a School, College, Department or Division of Education

**U.S. Office of Education; *An Introduction to Career Education, A Policy Paper of the U.S. Office of Education*, 1975.

I. CAREER EDUCATION ACTIVITIES

1. Which one of the following statements best characterizes your School of Education's position on the Career Education concept at the present time? (please darken the appropriate circle ●)

   ○ The concept of Career Education is not being actively discussed at the present time

   ○ The concept of Career Education is under discussion but no formal position has been taken by the School of Education

   ○ The concept of Career Education has been developed into a formal position by the School of Education (please forward if possible, under separate cover, a copy of said position)

   ○ The concept of Career Education was considered and rejected as inapplicable for the School of Education (please feel free to use the space below to explain) ______________________________

   ____

   ____

2. To what extent does your definition of Career Education agree with the framework stated in the Introduction of this questionnaire? (please darken the appropriate circle)

Full Agreement and Goes Beyond	Full Agreement	Some Agreement	No Agreement
○	○	○	○

3. For each mode, please darken the appropriate circle to indicate the kinds of methods employed by your School of Education in implementing Career Education programs during 1974-75.

MODES OF IMPLEMENTING CAREER EDUCATION	METHODS EMPLOYED FOR CAREER EDUCATION In-school lectures, discussion, in-school exploration of career education, and/or use of textbooks	Use of guest speakers who represent businesses/ labor unions/government in the community	Interviewing of employers and employees in the community	Field trips to businesses	Work experience other than teaching	Other (please specify)
A degree program leading to certification in Career Education	○	○	○	○	○	○
Career Education courses within various academic departments (including the School of Education)	○	○	○	○	○	○
Interdepartmental courses in Career Education	○	○	○	○	○	○
Career Education treated as a sub-topic in a course not primarily designed for Career Education	○	○	○	○	○	○
Other (please specify) ______________________________	○	○	○	○	○	○

IMPORTANT NOTE: We would appreciate your supplementing your response in this questionnaire with any materials (statements of purpose, course descriptions, syllabi, curriculum guides, pamphlets, etc.) describing the Career Education programs currently offered or planned. Please send such documents to Career Education Survey, AACTE, One Dupont Circle, Washington, D.C. 20036

4. Please indicate the certification and service levels of education personnel for whom Career Education was designed and made available in 1974-75.

	SERVICE LEVEL				
CERTIFICATION LEVEL	Kindergarten and Preschool	Elementary	Middle School	Secondary	Post-Secondary
Preservice	○	○	○	○	○
Inservice: recertification	○	○	○	○	○
specialization	○	○	○	○	○

5. By darkening the appropriate circles, please indicate whether your School of Education conducted (in 1974-75), or will be conducting (in 1975-76), any *Career Education programs or activities* (excluding Vocational Education programs or activities) that are tailored specifically for any of the following categories or education specialists. (darken all that apply)

	1974-75	1975-76		1974-75	1975-76
Career Education Specialists	○	○	Physically Handicapped Children Specialist	○	○
Vocational Education Specialists	○	○	Mentally Handicapped Children Specialist	○	○
Guidance/Counseling Personnel	○	○	Gifted or Talented Children Specialist	○	○
School Librarians	○	○	Ethnic/Cultural Specialists	○	○
Curriculum Development Specialists	○	○	Administrators/ Supervisors	○	○
Subject Matter Specialists	○	○	Others (please specify) ____________	○	○

6. Has your State Department of Education established specific Career Education requirements for teachers? (please darken the appropriate circle)

Yes ○ No ○ If "yes" please send us, under separate cover, a copy of related documents if possible.

7. Please indicate the ways in which the concept of Career Education is being fostered among faculty members in your institution (darken all that apply).

- ○ Professional association meetings (e.g. AACTE Leadership Training Institute, American Personnel and Guidance Association)
- ○ Seminars/symposiums
- ○ In-service training for faculty members
- ○ Work experience other than teaching
- ○ Visits to businesses/labor/government
- ○ Visits to local public school Career Education programs or activities
- ○ Sabbatical(s) for Career Education-related projects
- ○ Faculty is on its own with respect to Career Education
- ○ Nothing is being done

8. Please indicate the kinds of support your School of Education provided for Career Education in local public schools during 1974-75 (darken all that apply)

- ○ None
- ○ Conducted summer workshops in Career Education
- ○ Offered summer courses in Career Education for in-service teachers
- ○ Career Education Materials Center
- ○ In-service teacher training
- ○ Evaluation of Career Education programs in the schools
- ○ Assistance in Career Education curriculum development
- ○ Career Education consulting
- ○ Others (please specify) ____________

____

9. For the years specified, indicate the programs in which *research and development activities in Career Education* were conducted and/or will be conducted by your School of Education (darken all that apply).

1974-75	1975-76
○ Master's Theses	○ Master's Theses
○ Doctoral Dissertations	○ Doctoral Dissertations
○ Faculty Projects	○ Faculty Projects

Please give names and department addresses of any faculty members in your institution doing research in training of Career Education personnel.

Name	Department Address

10. Has anyone in your institution received funds to conduct research and development or demonstration activities in Career Education from:
(please darken the appropriate circle)

○ ○ U.S. Office of Education (U.S.O.E.)
Yes No If "yes," please indicate the number of such grants and/or contracts ____.

○ ○ National Institute of Education (N.I.E.)
Yes No If "yes," please indicate the number of such grants and/or contracts ____.

○ ○ Other sources (please specify) ____________
Yes No ____________
If "yes," please indicate the number of such grants and/or contracts ____.

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II. MANAGEMENT OF CAREER EDUCATION PROGRAMS

11. Please check those sources of funding that supported your Career Education instructional activities in 1974-75 (and/or which will continue to support these activities in 1975-76) for students preparing to teach Career Education.

FUNDING SOURCE	1974-75	1975-76
Federal Governments Funds	______	______
State Program Funds	______	______
State R&D Funds	______	______
Foundation Grants	______	______
Endowments, tuition, fees, etc	______	______
School District Funds	______	______
Other (please specify	______	______
______________		

12. What approximate percentage of the total teacher education budget (including faculty salaries) of your institution was allocated for Career Education during the 1974-75 school year and/or will be used in the 1975-76 school year?

1974-75 ______ 1975-76 ______

13. Please indicate the ways in which your Career Education activities and programs for education personnel are developed and controlled/monitored. (darken all that apply)

Developed	Controlled Monitored	
○	○	By a college or institution-wide curriculum committee
○	○	By a person responsible for directing/coordinating Career Education efforts. PLEASE GIVE NAME, POSITION AND ADDRESS OF THIS PERSON.
		NAME ______________
		POSITION ______________
		DEPARTMENT ADDRESS ______________
○	○	By each department/program within the School of Education having the prerogative to develop, control and monitor its own Career Education efforts.
		By collaborative arrangements with one or more of the following:
○	○	school system(s)
○	○	other institution(s) of higher education
○	○	community service agency(ies) (e.g. social services, law enforcement)
○	○	local government (e.g. mayor's office, city/county council)
○	○	local businesses (e.g. manufacturing, construction)
○	○	other (please specify) ______________

For those mechanisms that you have indicated as having an administrative function in developing, controlling and monitoring career education activities, please send us copies of documents describing these agreements and/or arrangements, if possible. Please send them under separate cover to Career Education Survey, AACTE, Suite 610, One Dupont Circle, Washington, D.C. 20036.

III. OPINIONS

14. How much, in your opinion, did each of the following factors contribute to the *success* of Career Education in your School of Education in 1974-75? (please darken one in each row)

Contributed Greatly	Contributed Somewhat	No Contribution	
○	○	○	Support of School of Education faculty
○	○	○	Support of the business/labor/industry/government communities
○	○	○	Availability of funds
○	○	○	Availability of curriculum materials for college students
○	○	○	Assistance from state education agency
○	○	○	Assistance from Federal agencies
○	○	○	Support of School of Education administrators
○	○		Other ________________ (please specify)

15. How much, in your opinion, did each of the following factors contribute to any *difficulty* in implementing Career Education programs in your School of Education in 1974-75? (please darken one in each row)

Contributed Greatly	Contributed Somewhat	No Contribution	
○	○	○	Lack of trained staff
○	○	○	Lack of interest on the part of the faculty
○	○	○	Lack of funds to train staff
○	○	○	Lack of funds to purchase materials
○	○	○	Confusion between Career Education and vocational education
○	○	○	Lack of interest on the part of the state education agency
○	○	○	Lack of interest on the part of the business/labor/industry/government communities
○	○		Other ________________ (please specify)

16. Please indicate your assessment of the relative importance that your School of Education places on training education personnel to prepare public school students for the following student outcomes.

Absolutely necessary	Important	Good if resources are available	Not an appropriate goal for education personnel preparation	Education personnel should be trained to prepare students so that when the students leave school they are ....
○	○	○	○	competent in the basic academic skills required for adaptability in our rapidly changing society.
○	○	○	○	equipped with good work habits.
○	○	○	○	capable of choosing a personally meaningful set of work values that foster a desire to work.
○	○	○	○	equipped with career decision-making skills, job-hunting skills, and job-getting skills.
○	○	○	○	equipped with vocational personal skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.
○	○	○	○	capable of making career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.
○	○	○	○	aware of means available to them for continuing and recurrent education once they have left the formal system of schooling.
○	○	○	○	capable of achieving success in a paid occupation, in further education, or in a vocation consistent with theircurrent career education.
○	○	○	○	capable of success in incorporating work values into their total personal value structure in such a way that they are able to choose what, for them, is a desirable lifestyle.

17. (Optional) What, in your opinion, is the future of Career Education at your School of Education?

18. (Optional) What would you like to see about Career Education in a report to Congress?

APPENDIX E

Cataloging and Evaluation of Instructional and Reference Materials

This appendix contains materials referred to in Chapter 6, "The Status of Career Education as Reflected in Instructional and Reference Materials." These items have all been instrumental in the process of cataloging and evaluating commercial and noncommercial career education materials.

1. A sample screening form for commercial materials.
2. A sample cataloging form for noncommercial materials. This form was developed by the U.S. Office of Education.
3. A sample cataloging form for commercial materials. This form, labeled "Product Profile Sheet," differs slightly from the USOE cataloging card, as it has two additional categories: "Cost" and "Target Population."
4. A Guide to Definitions of Catalog Areas and Items. This report was developed to assist catalogers in their task and is available in the Office of Career Education Library and may be consulted by anyone interested in locating items in the library.
5. A sample evaluation instrument. This sample form includes percentages indicating frequency of response to each item for both commercially and non-commercially produced materials that have been evaluated. Because of basic differences in the nature and intent of these two types of materials, comparisons should be made with care and with full knowledge of these differences.
6. A copy of the "Assessor's Manual, " which presents criteria and directions for using the evaluation instrument.

SCREENING FORM - COMMERCIAL MATERIALS

Name of Material____

Code Number____

Copyright Date__________________ (pre-1972 removed from system)

1. Is the material available?
   Yes_______
   No________ Removed from system

2. Is the material designed for use by (check all that apply):
   a. Teachers_____
   b. Students_____
   c. Program Planners_____
   d. Parents______
   e. Community members____
   f. Other_________ Removed from system

3. Does the material pertain to one of the following career stages?
   a. Career Awareness______
   b. Self Awareness________
   c. Career Exploration____
   d. Career Decision Making______
   e. Career Entry__________
   f. None of the above____ Removed from system

4. Is the material exclusively vocational education (i.e., designed to give specific training in various occupations)? (Defined as Career Preparation--#G5 on the USOE Catalog card.)
   Yes______ Removed from system
   No_______

STATUS OF MATERIAL:

Screened out of system______

Ready for assessment________

Date________________________

Reviewer____________________

Cataloging Card for Noncommercial Materials

A. ____________________ Retrieval Number

B. ____ Title or Brief Description of Material

C. ____________________ Source & Date of Material

D. Educational Level
- ____1. Preschool
- ____2. Early Elementary (K-3)
- ____3. Upper Elementary (4-6)
- ____4. Junior/Middle (7-9)
- ____5. Senior (10-12)
- ____6. Post-Secondary
- ____7. Adult

E. Discipline and Content Area
- ____ 1. Agriculture
- ____ 2. Art
- ____ 3. Business
- ____ 4. Distributive Education
- ____ 5. English Language Arts
- ____ 6. Foreign Languages
- ____ 7. Health Occupations
- ____ 8. Health and Safety in Daily Living, Physical Education and Recreation
- ____ 9. Home Economics
- ____10. Industrial Arts
- ____11. Mathematics
- ____12. Music
- ____13. Natural Science
- ____14. Office Occupations
- ____15. Safety and Drivers Ed.
- ____16. Social Sciences
- ____17. Technical Education
- ____18. Trade & Industrial Occup.
- ____19. Cocurricular Activities
- ____20. Differentialized Curriculum for the Handicapped
- ____21. Gen'l Elem. & Sec. Education
- ____22. Career Adaptability Skills
- ____23. Career Guid. & Counseling
- ____24. Career Information
- ____25. Community Relations
- ____26. Cooperative Work Exp.
- ____27. Evaluation
- ____28. Follow-up
- ____29. Management
- ____30. Placement
- ____31. Staff Development
- ____32. Other ____________

F. Career Cluster
- ____ 1. Agri. Bus. & Natural Res.
- ____ 2. Business and Office
- ____ 3. Communications and Media
- ____ 4. Consumer and Homemaking Ed.
- ____ 5. Construction
- ____ 6. Environmental Control
- ____ 7. Fine Arts and Humanities
- ____ 8. Health
- ____ 9. Hospitality and Recreation
- ____10. Manufacturing
- ____11. Marine Science
- ____12. Marketing and Distribution
- ____13. Personal Services
- ____14. Public Services
- ____15. Transportation

G. Career Education Stage
- ____ 1. Career Awareness
- ____ 2. Self Awareness
- ____ 3. Career Exploration
- ____ 4. Career Decision Making
- ____ 5. Career Preparation
- ____ 6. Career Entry
- ____ 7. Career Advancement

H. Special Groups
- ____ 1. Culturally Different
- ____ 2. Ethnic
- ____ 3. Female
- ____ 4. Gifted and Talented
- ____ 5. Incarcerated
- ____ 6. Mentally Handicapped
- ____ 7. Physically Handicapped
- ____ 8. Problem Reader
- ____ 9. Senior Citizen
- ____10. Other ______________

I. Type of Material
- ____ 1. Administrative Material
- ____ 2. Bibliography or Directory
- ____ 3. Curriculum Guide
- ____ 4. Evaluation Instrument
- ____ 5. Instructional Unit
- ____ 6. Instructional Module
- ____ 7. Laboratory-Practice Manual
- ____ 8. Simulation Situation
- ____ 9. Student Workbook or Manual
- ____10. Teacher's Guide
- ____11. Textbook
- ____12. Audio Tapes
- ____13. Cassettes
- ____14. Films ___8mm ___16mm
- ____15. Filmstrips
- ____16. Records, Discs
- ____17. Slides
- ____18. Transparencies
- ____19. Video Tapes
- ____20. Activity Kits
- ____21. Games
- ____22. Puzzles
- ____23. Tools and Related Items
- ____24. Other ______________

AIR CATALOGING FORM FOR COMMERCIAL MATERIALS

PRODUCT PROFILE SHEET

A.__________ Date:__________

____

B ☐ Published 1975

C. Title______________________________________

____

D. ☐ single item single item cost $________

☐ set (contains more than one piece)

cost per set $______ No. of pieces_____

☐ pieces may be purchased separately

Type of material	Cost/piece
Printed material	$______
Video tape	$______
Films	$______
Manipulative kit	$______
Audio materials	$______
Other non-printed	$______

E. Educational Level

_____1. Preschool
_____2. Early Elementary (K-3)
_____3. Upper Elementary (4-6)
_____4. Junior/Middle (7-9)
_____5. Senior (10-12)
_____6. Post-Secondary
_____7. Adult

F. Discipline and Content Area

_____1. Agriculture
_____2. Art
_____3. Business
_____4. Distributive Education
_____5. English language arts
_____6. Foreign languages
_____7. Health Occupations
_____8. Health and Safety in Daily living, Physical Education and Recreation
_____9. Home Economics
_____10. Industrial Arts
_____11. Mathematics
_____12. Music
_____13. Natural science
_____14. Office Occupations
_____15. Safety and Drivers Ed.
_____16. Social Sciences
_____17. Technical Education
_____18. Trade & Industrial Occup.
_____19. Cocurricular activities
_____20. Differentialized Curriculum for the Handicapped
_____21. Gen'l Elem. & Sec. Education
_____22. Career Adaptability Skills
_____23. Career Guid. & Counseling
_____24. Career Information
_____25. Community Relations
_____26. Cooperative Work Experience
_____27. Evaluation
_____28. Follow-up
_____29. Management
_____30. Placement
_____31. Staff Development
_____32. Other______________

G. Career Cluster

_____1. Agri. Bus. & Natural Res.
_____2. Business and Office
_____3. Communications & Media
_____4. Consumer & Homemaking Ed.
_____5. Construction
_____6. Environmental Control
_____7. Fine Arts & Humanities
_____8. Health
_____9. Hospitality & Recreation
_____10. Manufacturing
_____11. Marine Science
_____12. Marketing & Distribution
_____13. Personal Services
_____14. Public Services
_____15. Transportation

H. Career Education State

_____1. Career Awareness
_____2. Self Awareness
_____3. Career Exploration
_____4. Career Decision Making
_____5. Career Preparation
_____6. Career Entry
_____7. Career Advancement

I. Special Groups

_____1. Culturally different
_____2. Ethnic
_____3. Female
_____4. Gifted and Talented
_____5. Incarcarated
_____6. Mentally Handicapped
_____7. Physically Handicapped
_____8. Problem Reader
_____9. Senior Citizen
_____10. Other______________

J. Type of Material .

_____1. Administrative material
_____2. Bibliography or Directory
_____3. Curriculum Guide
_____4. Evaluation Instrument
_____5. Instructional Unit
_____6. Instructional Module
_____7. Laboratory-Practice Manual
_____8. Simulation Situation
_____9. Student Workbook or Manual
_____10. Teacher's Guide
_____11. Textbook
_____12. Audio Tapes
_____13. Cassettes
_____14. Films____8mm____16mm
_____15. Filmstrips
_____16. Records, Discs
_____17. Slides
_____18. Transparencies
_____19. Video tapes
_____20. Activity Kits
_____21. Games
_____22. Puzzles
_____23. Tools and Related Items
_____24. Other______________

K. Target Population

_____1. Students
_____2. Teachers
_____3. Program Planners
_____4. Parents
_____5. Community members

A Guide to Definitions of Catalog Areas and Items

A. Title or Brief Description of Material

The title given on the cover of the material should be listed. Materials that are divided into two or more volumes should be classified separately if the content varies enough to warrant such action. Materials coming from one school district that are similar in format, but not bound together into one booklet, should be separated and indexed as though they had come from different sources; an index card reflecting the one or two subject areas or careers present in a unified portion of the material should be more useful than a card with many categories checked that attempts to give a picture of a group of materials related only by format and source. Where separate volumes or booklets existed in a packet, divide and classify them separately.

B. Source and Date of Material

The source given should be the school district or school that had sponsored the writing and dissemination of the material. Where the source or date of the material is not known, this category should be left blank. City and State should also be noted.

C. Educational Level

Check categories for whatever grades are given in the body of the material. Materials with grades given as 9-12 receive checks in both 7-9 and the 10-12 levels. If the grades given are 3-4, both K-3 and 4-6 grade levels are checked. If no grade level was given, an estimate should be made. In most cases, the postsecondary level is considered equivalent to the adult level, and both may be checked, unless the material specifies only one of these categories.

D. Discipline and Content Area

The organization or focus of the material will determine which and how many items will be marked in this category. The material may be organized around certain given subject areas, which should be recorded as stated. If the material is organized around large concepts (e.g., the world of work, our community), activities will probably be divided into several main subject areas, which are all marked in this category. Poorly defined or briefly covered subject areas are not recorded. When the material is oriented around one or more careers, rather than subject areas, and activities were not necessarily divided into subject areas, an effort should be made to determine to which subject area this occupation might be most applicable. Clearly, a booklet on the work of a doctor would fall into the health content area. Information on accounting or secretarial careers would most likely be used in business and possibly math classes. A pamphlet on meteorology would be placed in the science content area. In summary, discipline and content area is determined either by the subject areas listed for career education activities or by whatever subject area seems most relevant to the occupation described.

Following is a listing of general topics included in the various discipline and content areas:

1. Agriculture. Occupations involving farming, animal husbandry, dairy careers, ranching, horticulture, other occupations involving the immediate products of a farm.

2. Art. Careers and activities involving drawing, painting, illustrations, graphics, cartoons, sculpture, museum work. Also include activities directed toward construction of murals, bulletin boards and posters.

3. Business. To be considered in conjunction with No. 14 (Office Occupations). Business includes careers, skills, and activities concerned with management, administration of large or small organizations and services, accounting, personnel work. Office occupations are usually checked when secretarial or other lower level office jobs are considered.

4. Distributive Education. Subject matter, usually at the secondary level, that considers the economics of the producer and the consumer.

5. English Language Arts. Activities designed to develop (a) understanding of the language system, (b) proficiency in the use of English, (c) appreciation of literary forms, and (d) understanding of the relationship of literature to everyday life and culture. Activities include development of speaking, writing, reading, and listening skills. Occupations falling into this category are usually involved with communications.

6. Foreign Languages. Activities in this category are similar to those listed in 5 (English Language Arts). Occupations utilizing foreign languages include interpreters, guides, travel specialists.

7. Health Occupations. Occupations in medical, nursing, dental, health research, and allied fields.

8. Health and Safety in Daily Living, Physical Education and Recreation. Activities that develop awareness of and skills for promoting individual and group health and safety. Occupations involving sports and associated leisure activities.

9. Home Economics. Activities and occupations related to food preparation and service, clothing construction and design, child care and family life, and home management.

10. Industrial Arts. Activities and occupations in carpentry, metalwork, machine construction and maintenance (including automobiles).

11. Mathematics. Activities and occupations concerned with numbers and shapes, calculations, and relationships between quantities. Includes computer science activities and occupations.

12. Music. Activities and occupations involving instrumental or vocal music, composition, performance, and teaching of music.

13. Natural Science. Activities and occupations involving physics, biology, chemistry, and earth science; or using or teaching the scientific method. Occupations in meteorology, geology, labor-

atory and field research are applicable to and most likely to be taught in this subject area.

14. Office Occupations. See 3 (Business).

15. Safety and Drivers Education. Activities concerned with safe operation of automobiles and pedestrian conduct in traffic.

16. Social Sciences. Activities and occupations in the fields of history, economics, political science, sociology, anthropology, psychology, geography, and philosophy. Materials that deal with the community and community relations fall into this category, especially when present in lower grade level materials.

17. Technical Education. Postsecondary training in specialized fields such as nursing, engineering, and medical laboratory work. Occupations falling into this category usually involve a combination of several subject areas or are specialized beyond subjects considered in secondary programs.

18. Trade and Industrial Occupations. This category is usually marked when the content or subject area of Industrial Arts was also marked. Trade occupations are those of the plumber, carpenter, electrician, and so on, and industrial occupations are those involving machines and manufacturing.

19. Cocurricular Activities. These are school-sponsored, career-oriented activities such as career-nights, student workshops, and so on. The activity would be carried out outside of the self-contained classroom, but would supplement the career education curriculum.

20. Differentialized Curriculum for the Handicapped. This category should be checked when all or a large majority of the material is designated for or illustrates methods appropriate for special education.

21. General Elementary and Secondary Education. Mark for materials

within any subject area and grade level that contain large portions that are not oriented toward or infused with career education.

22. Career Adaptability Skills. Activities directed towards awareness and acquisition of work-related skills:
    a. Basic academic skills important for work in any field. These skills are usually associated in some way with the world of work or specific careers.
    b. Work habits and values, including dress, work regulations, attitudes and procedures for holding a job. Habits that are likely to cause one to have trouble at or be fired from a job.
    c. Job getting skills, including interviewing techniques, social security information, application procedures, resumes, how to represent and present oneself.
    d. Resources for locating jobs: information about job agencies, how to read and take action on want ads, and so on. Writing letters for prospective employment.
    e. Knowledge of work and work environments in general. Personal preferences and employment needs, job preferability scales. Knowledge about the changing nature of work, what work may by like in the future, possible jobs of the 1980s.
    f. Study skills, following directions, giving directions.

23. Career Guidance and Counseling. Includes materials that are directed towards helping people become aware of, explore, make decisions about, prepare for, enter, and/or progress in various specific kinds of paid or unpaid work. The category is almost always marked when the material belongs to the Career Exploration stage.

24. Career Information. Facts about specific jobs for either teacher or student use. This can be information about the work force in general, such as the percentage of minorities in a certain occupation, outlooks for specific jobs, and so on. Career information may take the form of a story for elementary level children that describes requirements for being a police officer or, on a higher

level, the information may be as organized and detailed as part of the Occupational Outlook Handbook, which gives the benefits, requirements, training, and lifestyles associated with many careers. Factual information about the jobs must actually be present; the reader should not have to refer to other resources.

25. Community Relations. When speakers, field trips, or other activities involving the participation of workers in the community are included as a significant portion of the material, this category should be checked. A Community Relations material might take the form of a guide to local resource persons and businesses.

26. Cooperative Work Experience. Participation in a real work environment, as a paid or unpaid employee, for the purpose of job exploration or improvement of skills. Includes guidelines written for such programs (which are usually school sponsored) and directories of potential employers that offer work experiences.

27. Evaluation Instrument. This should be marked if all, or a major part of the material, is an evaluation of a student's interests, abilities, or skills.

28. Follow-up.

29. Management. Mark if material is targeted for administrators.

30. Placement. Mark if material is targeted towards counselors.

31. Staff Development. Mark if material is targeted towards teachers. (Inservice training programs, instructions on how to develop curricula, etc.)

32. Other. Use for content areas not included above.

E. Career Cluster

The U.S. Office of Education has grouped all occupations into 15 categories or clusters. Each cluster contains occupations in a related field. Clusters should be checked only when they are stated as clusters in the material or when they can be fairly quickly determined from the enclosed guide. If jobs in certain clusters or the clusters themselves did not receive significant treatment in the material, make no checks. A category 16 (Oriented Around Clusters) has been added to the 15 USOE career clusters listed, and is used to indicate materials that encompass the other 15 USOE career clusters.

One job could belong to more than one cluster, depending on the context in which it was treated. Forest rangers, for example, fall into all three of the following clusters: Agri-Business and Natural Resources, Environmental Control, and Hospitality and Recreation. The job of the physicist, as another example, needs to be associated with some context in order for it to be assigned a career cluster; physicists might function in Manufacturing, Business and Office, Marine Science, or Public Service (teaching) roles. Where the context of the job is not clearly defined, a career cluster is not checked, since to do so would put arbitrary limits on the job in question.

1. Agri-Business and Natural Resources. Removing nature's riches from the earth and using the land to raise animals and crops. Jobs with oil, trees, rocks, animals and plants.
   Examples: biochemist, farmer, fish farmer, florist, forest ranger, game warden, geologist, horticulturist, landscaper, logger, meat cutter, miner, minerals and petroleum researcher, nurseryman, park manager, pollution controller, veterinarian, wild life manager.

2. Business and Office. Typing, storing, studying, and distributing records of people's work. Jobs with typewriters, computers, copying machines, and records.
   Examples: accountant, bookkeeper, building manager, business machine operator, cashier, computer operator, computer programmer, CPA, general office clerk, insurance agent, machine transcriber, office supervisor, paymaster, secretary, stenographer, systems analyst.

3. Communication and Media. Getting information to people. Jobs with telephones, telegraphing, magazines, newspapers, books, radio,

and television.
Examples: actor, advertising researcher, broadcaster, camera operator, commercial artist, electricians, graphic artist, newspaper reporter, photographer, set designer, technician, telegraph operator, telephone installer, telephone line technician, telephone operator.

4. Construction. All activities in building. Jobs with cement, plastic, wire, and tile.
Examples: architect, bricklayer, carpenter, contractor, drywaller, electricians, engineer, excavators, heavy equipment operators, interior decorators, mason, painters, plumber.

5. Consumer and Homemaking. Jobs with food, clothing and textiles, home furnishings, and families.
Examples: child guidance, clothing designer, consumer researcher, cook, day-care supervisor, dietician, housekeeper, interior decorator, janitors, maintenance supervisor, modeling, patternmaker, presser, social workers, tailoring, waitress.

6. Environmental Control. The protection and saving of the natural things around us, including the repair of damage the human race has done. Jobs are concentrated with land, water, air, and all living things.
Examples: airborne pollution controller, biologist, chemical analyst, chemist, conservationist, environmental educator, government regulators, horticulturist, meterologist, pollution regulation enforcer, population growth trend monitor, researcher, sanitation expert, soil manager, surveyor, urban planner.

7. Fine Arts and Humanities. Creating, writing, performing, and studying. Jobs with music, plays, dance, poetry, art, novels, history, and languages.
Examples: actor, artist, camera/recording operator, composer, dancer, fashion designer, film processer, linguist, musician, novelist, painter, photographer, printer, sculptor, teacher, writer.

8. Health. Care and repair of the human body and mind.
Examples: ambulance driver, bacteriologist, dental assistant, dentist, lab technician, medical photographer, medical recorder, medical technologist, optometrist, pharmacist, physical therapist, physician, practical nurse, psychiatrist, psycholigst, registered nurse, X-ray technician.

9. Hospitality and Recreation. Jobs related to spare or leisure time activities. Jobs in parks, hotels, clubs, sports, amusements, and hobbies.
Examples: activities director, boat sales representative, camp counselor, coach, golf professional, hotel/motel manager, park commissioner, playground director, program planner, ranger, recreation director, ski instructor, sporting goods representative, stage hand, theater director, theater manager, tour director, travel agent, youth worker.

10. Manufacturing. The making of anything not found in nature. Designing, assembling, producing, packaging, advertising, and transporting.
Examples: accountant, assembly worker, chemist, cost controller, efficiency analyst, engineer, fork lift operator, handler, job interviewer, labor relations, machine operator, machine repairperson, marketing-sales representative, model developer, packager, promoter, quality controller, product inspector, researcher, retailer, transporter, truck driver, warehouseperson, welder, wholesaler.

11. Marine Science. All jobs concerning the oceans and the plants, animals, and minerals in the oceans. Fishing, growing, studying, exploring, and harvesting.
Examples: biologist, boat mechanic, boat operator, cartographer, chemist, commercial fisher, equipment repairperson, lab technician, marine biologist, navigator, ocean fisher, oceanographer, radio operator, researcher, salvager, scuba diver, underwater demolition worker.

12. Marketing and Distribution. Getting goods and services to the

customer. Jobs in buying from the manufacturer, shipping, storing, advertising, and selling.
Examples: advertising, banker, broker, buyer, cashier, clerk, dealer, exporter, insurance agent, keypunch operator, merchandiser, programmer, purchasing agent, research analyst, salesclerk, shipping clerk, stocker, store manager, window displayer.

13. Personal Services. Working on or near individual people or animals. Barbering, hairstyling, undertaking, pet grooming, boarding, and training.
Examples: barber, beauty shop owner, cosmetologist, day-care worker, gas station attendant, hair stylist, minister, mortician, pet care, product demonstrator, TV repairperson, usher.

14. Public Services. Work which benefits groups of people. Teachers, police, firefighters, government workers, military, and public utilities.
Examples: bill collector, counselor, drug abuse worker, elected/appointed government official, employment counselor, firefighter, judge, lawyer, librarian, military person, police officer, postal clerk, postal carrier, practical nurse, public health nurse, sanitation engineer, social worker, teacher.

15. Transportation. Moving people and goods from one place to another. Airlines, railroads, ships, trucks, and buses.
Examples: aircraft mechanic, airplane pilot, auto mechanic, diesel mechanic, dispatcher, equipment repairperson, estimators, freight handler, inspectors, merchant marine, railroad engineer, railroad mechanic, railroad switchperson, reservationist, security agents, signals operator, spacecraft engineering, flight attendant, taxi driver, truck driver, vehicle operator.

F. Career Education Goals

1. Career Awareness. Includes instruction or activities designed to teach about the "world of work," familiarity with what work is in the family or societal context, work appreciation, job interdependence, individual differences in preferences and limi-

tations for work environments, interrelationships of work and culture, changes in the nature of work due to technology, work definitions (work is play, work is the result of education, work fulfills wants and needs), worker values (importance of advancement, achievement, creativity, security, social status, and so on in specific jobs), importance of work, work as divided into goods and services.

2. Self Awareness. Interpersonal relationships and group dynamics; examination of self and assessment of self-concept; appraisal of interests and capabilities; setting goals, deciding values and opinions; learning about emotions.

3. Career Exploration. Instruction or activities to teach or help explore specific careers and jobs. A material would fall into this category if it dealt substantially with one or more specific careers (the police officer, the farmer, the storekeeper, etc.). Planning guides, activity kits designed for hands-on experience, and factual materials receive checks in this category if they are directed to or add to the process of investigating specific careers.

4. Career Decision Making. Includes both decision-making skills in general and decision-making that involves examination of the advantages, disadvantages, and individual potential for specific jobs or careers. The category is used when an examination was fairly extensive and when it was focused on the individual choice process. Such a treatment usually involves a well-defined plan for teaching or learning decision-making skills. Matching job descriptions to individual interests is an activity usually included in this category if it is a significant portion of a material.

5. Career Preparation. Because this category refers to development of specific vocational skills (after a career decision has been reached), and materials concerned with such skill training were not considered part of the career education materials collection phase of this study, very few materials will receive checks in

this area.

6. Career Entry. Materials which provided instruction or practice in skills associated with acquiring a job; writing resumes, interview techniques, job search methods, and so on.

7. Career Advancement. None of the materials examined will fall into this category, which is understood to be concerned with mid-career changes in or development of a specific career.

G. Special Groups

Items in this category were marked when materials contained significant portions that would merit examination by these special groups or those who teach and work with them. Definitions for the categories follow those given in the USOE Classification Scheme. Many materials are labeled "Special Education", with no details given that would enable the cataloguer to determine whether the instruction is directed towards mentally or physically handicapped students or problem readers. In these cases, the category of Other and categories for Mentally Handicapped and Physically Handicapped should all be checked for noncommercial materials, but only the category of Other for commercial materials.

1. Culturally Different. Pupils who have deviations or deficiencies in cultural or environmental background that adversely affect their learning ability or general performance in school.

2. Ethnic Group. A group of people of the same race or nationality who share a common and distinctive culture.

3. Female.

4. Gifted and Talented. Pupils identified by professionally qualified personnel as being mentally gifted or talented in areas such as general academic work, fine arts, vocational and technical areas, athletics, human relationships, and so on.

5. Incarcerated. Imprisoned.

6. Mentally Handicapped. Pupils identified by professionally quali-

fied personnel as being mentally retarded, according to degree of retardation. This includes those individuals whose level of mental development is such that they have been identified as unable, without special help, to profit from the usual school program.

7. Physically Handicapped. Pupils identified by professionally qualified personnel as having one or more physical handicaps; this would include the blind, the hard of hearing, those with speech defects, and the crippled.

8. Problem Reader. A seriously disabled reader, one who is reading at a level far below his or her capacity and who is experiencing difficulty in progressing under normal learning conditions.

9. Senior Citizen. An elderly or aged person, especially one over 65 years of age who is retired or living on a pension.

H. Type of Material

Multiple checks will appear frequently in this section, indicating that materials are usually comprised of a variety of useful portions and could be accessed for different purposes. Those types of materials (Textbooks, Audio Tapes, Cassettes, Films, Filmstrips, Records and Discs, Slides, Transparencies, Video Tapes, Tools, etc.) which do not usually produce identification problems, are not defined here.

The following definitions are given for items which might be open to several interpretations:

1. Administrative Material. Use when sections of a material contain results of final reports, objectives, plans for career education programs, developmental guidelines and guides, program evaluations, workshop records, career education philosophies, guidance materials, progress reports, and so on.

2. Bibliography or Directory. Use when all or a significant portion of a material is a materials resource guide or guide to community resources and speakers. These take the form of lists of schools,

programs, requirements for educational programs, vocational preparation centers, and so on.

3. Curriculum Guide. This type of material is always intended for teacher use. To be included in this category, a material must be complete in itself, that is, it must be ready to use by teachers without much additional preparation or organization (except to collect resources suggested). Usually the materials contain lists of activities for the classroom built around definite, stated goals and objectives, and accompanied by specific resources to be used with the various activities to arrive at the goals. Methods for teacher and student evaluation of the success of different curriculum phases or units might be included. The curriculum guide will range from a short but complete instructional program to be taught in one subject area or dealing with one career to a larger semester course on one or more topics (Self Awareness, for example). The guide is frequently a collection of career education units containing objective activities and resources for many subject areas and careers. Note that the guide does not simply contain lists of activities; these must be associated with other elements that make the curriculum guide a unified tool for planning and implementing career education instruction.

4. Evaluation Instrument. This includes both formal instruments for measuring program effectiveness and more informal student tests, teacher and student questionnaires on program outcomes and student and teacher self-evaluations. As with the other categories, Evaluation Instrument may be marked when a significant portion of the material is concerned with evaluation.

5. Instructional Unit. Compare to Curriculum Guide (above). Note that the Instructional Unit is designed for teacher use, in contrast to the Instructional Module, which is always for student use. Materials in this category are plans for instruction in the classroom, often organized around some general or even specific objectives, but requiring a good deal of additional work by the teacher in order to be used. The unit may consist of detailed

objectives only, with few or no activities for implementation. Activities may be given, but are unrelated to objectives, purpose, or resources. Like the curriculum guide, the instructional unit may be concerned with one subject area or career, or may give an outline for a much more comprehensive program. The most significant factor differentiating the instructional unit from the curriculum guide is the amount of preparation required for the teacher to implement the program; the instructional unit is simply not as complete or coherent a material as the curriculum guide.

6. Instructional Module. In contrast to the Instructional Unit, which is teacher-directed, the instructional module is for students. These are materials in modular form--separate learning activity packages designed for the student to use without much aid from the teacher. Such modules included materials called Learning Activity Packages (LAP) Kits that could deal with any collection of skills, subjects, concepts, or careers.

7. Laboratory/Practice Manual. Provides exercises or experiences that give students an opportunity to apply or practice learning in a laboratory situation.

8. Simulation Situation. A unified program of activities that was designed to create a "real-life" situation or working environment in the classroom. At the elementary level, this sometimes involved the construction and management of a school store to help children experience the jobs involved in or touched by such an operation. At higher educational levels, a simulation situation might be a more sophisticated long-term activity such as the organization and management of a mock political convention or creation of a bank.

9. Student Workbook or Manual. Student-directed materials often referenced to an item in an accompanying textbook. It can be a supplementary unit that a teacher would use for drill and practice exercises, or it may be a handbook of the "how-to" type or an informational piece for students.

10. Teacher's Guide. An aid to help teachers use or implement a particular curriculum material; it usually accompanies a student material.

11-23. These categories are self-explanatory.

24. Other. Materials that should be placed in this category include, but are not limited to, the following:
    a. Resource lists. References given in a curriculum guide to a significant enough degree that the list would be worth accessing. Sources or locations for the resources must be listed and be available to the public or other school districts. For example, lists of movies available only to teachers within a local school district are not considered resource lists.
    b. Activity Lists. Compilations of career education activities that are not grouped under given objectives and are not part of a unified curriculum. These include pages or shorter lists of ideas or projects to be used by teachers to supplement a career education program of their own planning.
    c. Occupation Information. Career Information manterials.
    d. Bulletin Board Ideas.
    e. Children's Story. Not a text, but a supplemental reading material dealing with careers or one career.
    f. Dictionaries of career education terms.
    g. Infusion Examples. Illustrations of methods for introducing career education into the regular educational curriculum.
    h. Guidelines for Parents and the Community.

I. Target Population

Having determined the most frequent users of the material, the cataloger assigns the appropriate term within this category. Instructional materials are directed primarily toward teachers, counselors, and/or students. Occasionally program planners are listed as targets when the material has administrative elements. Curriculum plans, tests, and activities accessed first by teachers and later channeled to students in suitable form would be marked "teachers." When a student can immediately access the material without teacher interpretation, the target population is students. When the material requires interpretation and dissemination by a teacher before it is useable by students, "teachers" should be marked.

AMERICAN INSTITUTES FOR RESEARCH
CAREER EDUCATION MATERIALS EVALUATION INSTRUMENT

Date ____________

DOCUMENT NO. ____________

Assessor ____________

Title ______________________________

Author ______________________________

Publisher ______________________________ Date Published ____________

Task 1.0 RESEARCH DATA INFORMATION

Does the item have documented evidence of scientific evaluation?

1	3	5
* 89.4 / 85.6 There is no evidence of scientific evaluation.	9.2 / 12.2 Yes, there is reference to an in house report.	1.3 / 2.2 Yes, there is reference to a published report.

Task 2.0 CONTENT BIAS

Materials should be free from sex role stereotyping, ethnic/minority or religious bias, and job denigration (the imposition of artificial hierarchies of social values on various job or occupational categories).

2.01 The material includes clear positive references to ethnic/minority groups.

1	3	5	7
21.2 / 11.1 No, there are references only to majority groups.	16.9 / 73.3 No, references are neutral.	37.0 / 11.1 Yes, there are a few references.	24.8 / 4.4 Yes, there are extensive references.

2.02 Material contains undesirable ethnic/minority bias.

1	3	5
6.7 / 1.1 Yes, the material contains extensive bias (more than 2 instances).	51.7 / 28.9 Yes, the material contains a few instances (1-2) of bias.	41.5 / 70.0 No, the material is free of bias.

2.03 Material contains undesirable religious bias.

3	1	3	5
97.0 / 100 NA	0 / 0 Yes the material contains extensive bias (more than 2 instances).	0.3 / 0 Yes, the material contains a few instances of bias (1-2).	2.7 / 0 No, the material is free of bias.

2.04 Material includes balanced references to both sexes.

1	3	5
28.7 / 27.8 No, virtually all are references to only one sex.	36.5 / 52.2 No, references are neutral.	34.7 / 20.0 Yes, there are clear references to both sexes.

2.05 Material contains sex-role stereotyping.

1	3	5
28.7 / 13.3 Yes, there are many instances of sex-role stereotyping (3 or more).	46.7 / 35.6 Yes, there are a few instances of sex-role stereotyping (1-2).	24.6 / 51.1 No, the material is free of sex-role stereotyping.

2.06 Material contains instances of job denigration.

1	3	5
1.3 / 0 Yes, there are many instances of job denigration (3 or more).	53.2 / 2.2 Yes, there are a few instances of job denigration (1-2).	93.4 / 97.8 No, the material is free of job denigration.

☐ TOTAL RAW SCORE FOR TASK 2.0

*Note that throughout this section, percentages above the line indicate frequencies for commercial materials evaluated; percentages below the line are for noncommercial materials.

Task 3.0 ADEQUACY AND CONSISTENCY

Effective use of materials depends partially on the adequacy and consistency of their design. They should be designed so that users can identify precisely the nature and scope of content, the objectives to be attained and the methodologies to be applied. Users should be assured that these three elements are compatible and consistent with each other.

3.01 To what extent are the objectives for which the materials have been designed clearly and specifically stated?

1 — 57.1 / 18.9 No objectives are identified.
3 — 23.6 / 13.3 Objectives are identified but are not clear and specific.
5 — 19.2 / 67.8 Objectives are clearly and specifically stated.

3.02 To what extent is the material content adequate for achieving the objectives?

3 — 57.2 / 18.9 NA
1 — 0 / 1.1 Not adequate to achieve any objectives
3 — 0.6 / 1.1 Adequate to achieve few of the objectives
5 — 22.2 / 20.0 Adequate to achieve most of the objectives
7 — 20.0 / 58.9 Adequate to meet all of the objectives

3.03 To what extent does the organization of the content facilitate usage?

1 — 1.0 / 1.1 Material is not well organized.
3 — 31.0 / 24.4 Material is moderately well organized.
5 — 68.0 / 74.5 Material is very well organized.

3.04 To what extent does the format of the material facilitate its use?

1 — 2.2 / 5.6 Material format does not facilitates its use.
3 — 42.8 / 71.1 Material format usually facilitates its use.
5 — 55.0 / 23.3 Material format consistently facilitates its use.

3.05 To what extent are the methods suggested for presenting the content consistent with sound learning principals?

3 — 26.0 / 51.1 NA
1 — 20.9 / 1.1 There is little evidence of consistency.
3 — 42.6 / 14.4 There is some evidence of consistency
5 — 10.5 / 33.4 Methods consistently reflect awareness of sound learning principles.

☐ TOTAL RAW SCORE FOR TASK 3.0

Task 4.0 LEARNER PERFORMANCE EVALUATION

A sound evaluation process should provide opportunities for the users of materials to assess their own strengths and weaknesses and to plan appropriate actions based on findings. Materials should identify objectives to be attained over a prescribed period of time, techniques and procedures for evaluation that provide a qualitative and/or quantitative determination of how well the objectives have been met, and should be felexible for special user needs.

4.01 To what extent do the materials identify sound procedures for evaluating achievement of the objectives?

3 — 36.4 / 51.1 NA
1 — 20.7 / 1.1 Procedures are not identified.
3 — 30.6 / 8.9 Procedures are identified but not clearly set forth.
5 — 6.7 / 7.8 Procedures for evaluating some of the objectives are clearly set forth.
7 — 5.4 / 31.1 Procedures for evaluating most of the objectives are set forth.

4.02 To what extent are the procedures for evaluation flexible for special user needs?

1 — 57.3 / 52.2 NA
1 — 0.6 / 26.6 Procedures are not flexible for special user needs.
3 — 41.3 / 22.2 Procedures are flexible to meet some special user needs.
5 — 0.6 / 0 Procedures are sufficiently flexible to meet all special user needs.

4.03 To what extent are there provisions for diagnostic pretesting in conjunction with posttesting (4.01)?

3 — 47.0 / 52.2 NA
1 — 29.7 / 41.1 None
3 — 20.1 / 1.1 Pretesting is recommended but procedures for doing so are not set forth.
5 — 1.7 / 1.1 Clear provisions are set forth. Inadequate correspondence with posttest.
7 — 1.4 / 4.5 Provisions for pretesting are clearly set forth. Clear correspondence with posttest.

4.04 To what extent are remediation procedures identified?

1 — 47.0 / 52.2 NA
1 — 48.4 / 46.6 None
3 — 4.3 / 2.2 Procedures exist but additional direction is needed for specific applications.
5 — 0.3 / 0 Sound procedures and specific applications exist for remediation.

☐ TOTAL RAW SCORE FOR TASK 4.0

Task 5.0 VERSATILITY

In evaluating materials a major concern is the extent to which they are adaptable to fit both personal teaching styles and student learning styles. Indicators of adaptability include whether the unit includes provisions for students with special needs and optional teaching and/or instructional strategies (e.g., simulation, group instruction, individual programs). In general, a unit of material should enable users to fit it into their own teaching styles and patterns of instruction.

5.01 To what extent are optional instructional strategies provided?

3	1	3	5
26.0 NA 51.1	15.9 Unit can be taught using only 2.2 one instructional strategy.	33.0 A narrow range of instructional 13.3 strategies (2-4) is provided.	24.9 A broad range of instructional 33.4 strategies (5 or more) is provided.

5.02 To what extent can various organizational patterns (i.e., large and small group instruction, open school, etc.) be followed?

3	1	3	5
26.0 NA 51.1	0 No provisions 0	0.6 Limited adaptability (3 or less) 1.1	73.3 High level of adaptability (more than 3) 47.9

5.03 To what extent is the material adaptable to alternative staffing patterns?

3	1	3	5
26.0 NA 51.1	0.4 Material can be taught using 0 only one staffing pattern.	4.6 Limited adaptability (3 or less) 1.1	69.0 High level of adaptability (more 47.8 than 3)

5.04 To what extent can other media (film, other audio-visual materials, and manipulative materials) be effectively used in the instructional process?

3	1	3	5
26.0 NA 51.1	23.3 Relies on one media source 5.6 (e.g., printed material).	34.1 Provides for two categories of media 8.9 as possible instructional aids.	16.5 Provides for three or more categories 34.4 of media as possible instructional aids.

5.05 To what extent are alternative activities for students with special needs (learning or physical handicaps) provided?

3	1	3	5
26.0 NA 51.1	67.4 No specific recognition 46.7 of special needs	5.3 Some recognition of special 2.2 needs (e.g., slow readers)	1.3 Recognizes student differences and provides 0 for activities uniquely suited to students with special needs.

5.06 To what extent is individualized as well as group instruction provided?

3	1	3	5
26.0 NA 51.1	17.9 No individualized instruction 2.2 and difficult to adapt.	23.0 No individualized instruction, 5.6 but easy to adapt.	33.0 Individualized instructional methods 41.1 included.

5.07 To what extent are there provisions for using the material in a more comprehensive education program?

3	1	3	5
26.0 NA 51.1	36.4 None 12.2	30.2 Provisions are included but are described 4.4 only in general terms.	7.3 Provisions are sound and are clearly set forth. 32.3

☐ TOTAL RAW SCORE FOR TASK 5.0

Task 6.0 USER SUPPORT COMPONENTS

Successful use of material depends in part on the adequacy of its directions and on the background and level of skill necessary for the user.

The primary judgments to be made are the degree and/or adequacy of materials to stand alone, and the degree to which the materials can be used without support resources or prior experience and without additional directions.

6.01 To what extent are directions adequate for use by a person inexperienced with the material content?

1	3	5
0.3 3.3 No directions provided, but necessary	2.7 3.3 Limited to use by a person experienced with the content presented.	97.0 93.4 Adequate for use by an inexperienced person.

6.02 To what extent is background information provided?

3	1	3	5
52.9 37.9 NA	3.1 2.2 Not provided, but necessary.	2.7 10.0 Necessary but incomplete and requires extensive study and other resources.	41.3 50.0 All necessary background information is provided.

6.03 To what extent are resource materials identified and referenced?

1	3	5
35.6 13.3 Not identified	4.7 10.0 Resources are identified but not referenced.	59.5 76.7 Resource references are sufficiently detailed to enable the user to locate the materials.

6.04 To what extent are additional training requirements or skills for successful use of the material identified and provided?

5	1	3	5
89.3 84.4 NA	1.9 1.1 Training requirements and skills are not identified, but necessary.	1.8 11.1 Training requirements and skills are identified but not clearly detailed.	7.0 3.4 Training requirements and skills are both identified and clearly detailed.

☐ TOTAL RAW SCORE FOR TASK 6.0

Assessor's Manual

Career Education Materials Survey

American Institutes for Research

ASSESSOR'S MANUAL
FOR THE
AIR CAREER EDUCATION MATERIALS EVALUATION SURVEY

The purposes of this manual are to present criteria and definitions for concepts set forth in the evaluation instrument and to guide the evaluator step-by-step through each item on the instrument. The criteria dealing with race and sex stereotyping are based on studies done by the Council on Interracial Books for Children and by Women on Words and Images for the EPIE Institute. We have used their terminology and some of their specific examples in setting up criteria.

Developed under Contract No. 300-75-0245 from the U. S. Office of Education, Department of Health, Education, and Welfare.

SECTION 1

1.0 Research Data Information

Apply the following criteria when selecting your response for a material:

#1 Contains no evidence that scientific research was conducted on the materials.

#3 Contains reference to an in-house study or unreferenced report, or mentions collecting information from users on their success in using the material.

#5 Contains reference to a research report or study that collected replicable evaluation data on the materials. The reference should be detailed enough so you could locate the study or report.

SECTION 2

2.0 Content Bias

One aspect of a good career education material is its attempt at reversing the patterns of institutional racism and sexism. When evaluating materials in terms of content bias, reviewers will look for evidence of racism and sexism.

The Council on Interracial Books for Children, and Women on Words and Images prepared guides for identifying racist and sexist examples in career education materials. These guides, part of the EPIE Career Education S*E*T*, should be read by the reviewer.

Criteria for Selection Responses for 2.0

2.01 A "clear positive reference" is either visual, written, or oral; furthermore, it represents a person who is a role model to whom a student using the material can relate constructively. Ethnic/minority groups include:

a. Afro-Americans
b. Latinos
c. Native Americans
d. Asian-Americans

Select options as follows:

#1 References only to majority groups or token representations of ethnic/minority groups.

#3 Neutral references, e.g., stick figures, names not obviously associated with any racial or ethnic group, etc.

#5 References to ethnic/minority groups which are not token but fall short of adequate representation of the population.

#7 References to ethnic/minority groups in approximate proportion to their numbers in the population.

2.02 Undesirable bias.

If whites are characterized as self-confident, in control, and "winning" in contrast to minorities, the reviewer should watch for examples of the visual, written, or oral instances listed below.

Visual Examples of Racism

Visual presentations that should be classified as instances of race bias include:

a. People stereotyped by skin color, facial features, hair styles, etc.,

b. minority people isolated from white co-workers,

c. minority people shown only being supervised or taking directions,

d. minority workers shown looking indecisive or confused,

e. minority workers shown only as unskilled workers, and

f. too small a minority representation (less than their proportion in the population).

Written and Oral Examples of Racism

In analyzing the written or oral content, reviewers should look for examples of materials that:

a. State or imply that accents, physical characteristics, or other personal traits are disadvantages in an occupation

b. Use or suggest testing as the best way to determine one's abiility to perform the job

c. Use derogatory terms (e.g.. boy instead of man when referring to adults, or "you people")

d. Encourage children to accept limited rights and limited roles

Further, the reviewers should consider questions such as:

a. Are minority people shown performing socially useful work?

b. Are minority people picutred against backgrounds that are culturally incongruous? (i.e., working in lily-white communities)

c. Are minority people shown serving white people? (e.g., waitresses, parking lot attendant)

d. Are white people shown serving minority people? (e.g., doctors, social workers, police)

Select options as follows:

#1 Using the above definitions, more than two instances of bias were found in the material.

#3 Using the above definintions, one or two instances of bias were found in the material.

#5 Using the above definitions, no instances of bias were found in the material.

2.03 Examples of undesirable religious bias are:

a. Denigrating a religion or set of religious beliefs.

b. Mentioning one or two religions--ignoring another major religion (Christian, Jewish, Buddist, Moslem)

c. Failing to mention religious leaders (ministers, rabbis, priests, etc.) when such mention would be appropriate (i.e., in a discussion of various types of counselors)

Select options as follows:

NA Use this category when the material needs no religious references and has no religious references (i.e., a film on the computer industry)

#1 More than two instances of bias found in the material

#3 One or two instances of bias found in the material

#5 No instances of bias found in the material

2.04 "Balanced" means equal numbers of men and women are depicted.

Select options as follows:

#1 Material has references to only one sex, has token references, or has negative references to one sex.

#3 Material attempts to represent both sexes fairly, but falls short of balance.

#5 Equal numbers of mean and women are depicted in each occupation presented in the material.

2.05 Sex-role stereotyping

If men are characterized as self-confident, in control, and "winning" in contrast to women, the following examples are evidence of sexism.

Visual Examples of Sexism

Visual presentations that should be classified as sexist include:

a. only one sex working at a given occupation

b. women or men presented only in traditional sex roles (for example, mom in an apron baking cookies when dad comes in from work)

c. vague or token representation on the job (i.e., women in the background, unidentified)

d. women looking confused or helpless on the job.

e. women shown only as unskilled workers

f. women always serving others

g. women being served by male "superiors"--MD's, dentists, etc.

h. grooming portrayed as an important part of preparing to go to work (the assumption that women will be judged especially for their physical qualities rather than their capabilities)

i. advocacy of a traditional dress code

j. women being supervised by men

Written and Oral Examples of Sexism

In evaluting the written and oral content, reviewers should look for sexist examples that:

a. Present traditional family responsibility--i.e., marriage and family problems as the female's responsibility

b. Portray grooming as more important for a woman than a man in the world of work.

c. Use sexist language

  1. Generic "he," "man" to mean "people"

  2. Generic "she" for secretaries, nurses, etc.

  3. Suffix "man"--i.e., craftsman

  4. Inconsistency--beginning language non-sexist, falling into sexist patterns

d. Women referred to as "girls" but men not referred to as "boys"

e. Comments on "getting a man" or attractiveness

Select options as follows:

#1 More than two instances of bias found in the material

#3 One or two instances of bias found in the material

#5 No instances of bias found in the material

2.06 Job denigration

Examples are:

a. Implying a job is only a steppingstone to a "higher position"

b. Presenting an occupation as "low level" (i.e., a job portrayed as inferior to other related jobs in a job cluster)

c. Referring negatively to a job in comparison with another (i.e., "If you don't finish dental school you might end up as a bricklayer.")

An "instance" is defined as denigration of one particular job. You should consider further denigration of that same job as the same "instance."

Select options as follows:

#1 More than two instances of bias found in the material

#3 One or two instances of bias found in the material

#5 No instances of bias found in the material

SECTION 3

3.0 Adequacy and Consistency

3.01 For this question, the definition of "objectives" is best set forth by examples. Select a category based on the examples below:

#1 To respond with this category, you should find no objectives in the material.

Examples are:

A. **FILM PURPOSE:**

SO YOU WANT TO BE A TOOL & DIE OR MOLD MAKER is one of an increasingly comprehensive series of motion pictures designed to introduce young people to the occupational opportunities available if they acquire the necessary training to achieve an entry level position.

As a "field trip you put in your projector," this film is designed to broaden the horizons of knowledge of both young men and women in relation to the role that tool and die or mold makers hold in our changing world of work.

It shows what members of this occupation do and explores some of the many career possibilities which the industry has to offer.

It will excite in some an interest and desire to learn more about this career, and in others this film will engender a keen appreciation of the important role of the skilled tool, die or mold maker in today's world.

B. **PURPOSE:**

This activity is designed to help individuals begin to recognize and identify the relationship of self to the world of work.

#3 This category should be marked when objectives are present but are stated in broad, general terms.

Examples are:

A. **EDUCATIONAL OBJECTIVES**

- To depict the responsibilities and demanding schedule that are part of an intern's routine.
- To provide insight into the internship year as one aspect of the medical world of work.
- To expose students to the problems that doctors confront in their professional practice.

B. Career exploration is a learning adventure that should be fun. As you explore careers, there are some definite steps which you should take. In particular, you should—

1. learn about the importance of jobs and where they are found;
2. learn something about people who work on those jobs;
3. find out what skills and abilities those workers need on their jobs;
4. get a good idea of what people do on those jobs and try out some tasks yourself;
5. look at the future of jobs and learn about career ladders.

#5 This category should be marked when objectives are stated in specific terms.

Examples are:

A. **Performance Objectives**

These objectives are to let you and your students know what will be expected of them during the time spent on this unit and are to help you evaluate their performance.

At the conclusion of the unit, the students will be able to:

1. describe the way in which a computer company processes information and solves problems;
2. list at least six occupations in the computer industry;
3. discuss the concept that people have different interests, temperament, values, and abilities;
4. decide if any of the occupations described in the film, the "Getting Started" section, or the game match their interests, temperament, values, and abilities enough to warrant further exploration
5. discuss the concept that age, sex, race, or religion do not limit a person's career options as they once did

B. **About Personal Service: New Ideas**

In this film, children will discover that most people are happier when they feel well and like the way they look. They will learn that:

- **Personal service activities are one way of helping other people.**
- **Making others feel better is an important part of life.**
- **Personal service involves helping people to look good and feel good about themselves.**
- **Some personal service helpers make people feel better by helping to solve their problems.**

C. **LEARNING TASKS**

At the conclusion of Chapter 5, you will be expected to complete the tasks described in the following paragraphs, under the conditions and criterion given for each.

Task 9. Be able to correctly answer true or false to the following 10 questions:

1. According to the Coleman and Kerner Reports, white Americans believe that their race is superior and have a right to rule others.
2. Peopleism is an action-oriented philosophy.
3. College-age students should take the initiative in bridging the "generation gap" rather than waiting for the initiative to come from their parents.
4. Today it is considered "more adult" not to smoke than to smoke.
5. Marijuana often produces psychological effects more harmful than those produced by either alcohol or tobacco.
6. Lysergic acid diethylamide (LSD) has mind-expanding benefits far exceeding any possible harmful effects from its use.
7. Alcohol is not a narcotic drug.
8. Maintaining premarital virginity by both the male and the female partners has positive rewards in easing the initial adjustments to marriage and increasing fidelity and trust in later married life.
9. Establishing a personal philosophy of life is relatively easy.
10. There are few clubs and organizations on most college campuses.

Conditions: No references permitted, including this PLAID; time 10 minutes.
Criterion: Ninety percent accuracy.

Task 10. Determine three major concerns of students on your campus.

Conditions: Outside of class prepare a questionnaire listing 10 items of concern which you believe are shared by your fellow students. Administer the questionnaire outside of class to 20 students (10 men and 10 women) on your campus. Ask the respondents to rank the 10 concerns in order of importance. Prepare a written summary of 250–500 words to include the results and to suggest solutions for the three major concerns.

Criterion: Be prepared to discuss the three major concerns revealed by your survey and your suggested solution of each at your next class meeting. Also be prepared to turn in your written results and suggested solutions at the next class meeting unless your instructor has designated another time.

3.02 Materials can adequately cover objectives wholly or partially. The response selected depends on how much of an objective was covered, as well as how many objectives were covered.

"Adequately cover" means to present enough information, exercises, etc., to enable the user to achieve the objective.

Select options as follows:

NA When the response to 3.01 is #1.

#1 When the material content does not cover any objectives.

#3 When the material covers approximately 1/3 of the objectives.

#5 When the material covers approximately 2/3 of the objectives.

#7 When the material covers all of the objectives.

3.03 "Organization of the content" refers to:

A. For a printed material

table of contents; headings; index; chapter/unit organization and consistency between units; general outline within the chapter/unit; bibliography; teacher guide matches student text

B. For an audio-visual material

flow of ideas; sequence of pictures, episodes; teacher's guide matches scenario

C. for a manipulative material

consistency between parts, i.e., a game and directions

Select options as follows:

#1 When the material contains no organizing features and cannot be easily used without them. This option should also be chosen if the organization features mislead the user by erroneous information. Examples are:

a. a set of several materials with no indication of how and by whom the materials should be used.

b. a material that contains a teacher's guide referring to student handbook sections that do not appear where they are said to.

#3 When the user can infer proper use of the material but the material itself does not contain a particular organizing feature or written directions. Examples are:

a. A set of books each with apparently equal value (You can be a carpenter, You can be a baker, etc.) with no guidelines as to which order the books should be used.

b. An audio-cassette unit with no directions for synchronization but with indications that the filmstrip and cassette are to be used simultaneously.

#5 When the material has a clear feature(s) to guide the user in proper use of the material. Examples are:

a. audio-cassette unit contains directions for synchronizing use of the filmstrip and cassette tape.

b. film contains pre-showing and post-showing discussion questions in the teacher's manual

c. teacher's guide contains color coded sections that match corresponding units in the student manual.

This option should also be chosen when the nature of the material dictates its proper use. For example, a film accompanied by discussion questions clearly applicable as post-screening exercises.

3.04 "Format" refers to:

a. printed materials--page layout, design, general shape and size, type face, readability

b. films--use of color, sound (clear/unclear), editing, quality of photography

c. records and tapes--quality of sound; speakers talk at a reasonable rate; materials easy to handle/play

Select options as follows:

#1 The format hinders easy use of the material. Examples are:

a. film with inaudible or fuzzy soundtrack

b. student manual with graphs inserted in distracting places (not near the verbal reference to it)

c. teacher's guide with abnormally small print

d. material that requires an excessive amount of flipping back and forth between pages

#3 The format neither hinders nor facilitates the use of the material. Examples are:

a. a standard textbook using standard page format and type size

b. a film with no visual glories yet adequate photography and sound

#5 The format of the material increase its appeal and facilitates its use. Examples are:

a. material presents important concepts in bold-faced type

b. film contains quality sound and photography which increase its audio-visual appeal

c. Answers to an exercise section appear on the back side of the questions to facilitate easy access.

3.05 This item focuses on the extent to which the material contains directions, activities, objectives, assessment procedures, etc., which are consistent with sound learning principles. The theories of learning are varied although general agreement can be found that certain processes take place in an individual who is learning. More important here is the extent to which the material can facilitate and encourage the learning process. Materials are agreed to be consistent with sound learning principles if they contain:

a. A statement of objectives--a user is more likely to learn material if he/she knows what the material should teach him/her

b. Assessment procedures--the learner should be made aware of his/her progress in the achievement of the objectives

c. Activities which stimulate learning

    1. demonstration
    2. repetition
    3. novel stimuli
    4. using acquired knowledge or skill

d. Reinforcement in the form of rewards, encouragement, etc.

e. Movement from easy to difficult content, building on skills and knowledge acquired in earlier units

f. Recognition of prerequisites to learning process, provision for ascertaining the presence of prerequisites, and provisions for teaching prerequisites if not present

g. Organization omitting extraneous content that interferes in the learning process

h. Contiguity--short lapses of time between stimulus (presentation of material) and response (activities, discussion session, etc.)

i. Association--requires students to relate learned material to what they already know

Select options as follows:

#A If the material is not to be learned (resource materials, etc.)

#1 If few (1 or 2) of the above criteria are met

#3 If some (3-5) of the above criteria are met

#5 If 6 or more of the above criteria are met

SECTION 4

4.0 Learner Performance Evaluation

Evaluation is any method used to appraise or assess (qualitatively or quantitatively) the skills, attitudes, abilities, achievement, etc., of the user. (It is not feedback given to the user, as part of the learning process.)

4.01 For the purposes of this item, a "sound procedure" for evaluation is defined as any method providing objective information about the extent to which the user of the material has attained the objectives set forth in the material.

Select options as follows:

NA If no objectives are stated in the material and the material has no evaluation procedures, but does have discussion questions that could be adapted as an evaluation.

#1 If the material has neither provisions for assessing the extent to which the objectives are achieved nor discussion questions that could be adapted; also, if the material has an "evaluation instrument" or discussion question, but these do not and cannot assess achievement of the objectives.

#3 If a) the material does not contain clear provisions for evaluation but does contain discussion questions, exercises, etc., which can be adapted for use as an objective evaluation of the achievement of the state objectives. An example is:

> After showing the film, lead students in a discussion using these questions:
>
> 1. How has the "information explosion" affected our society? How will it affect our society in the next ten or twenty years?
> 2. How do you think jobs may be changed as a result of the "information explosion"?
> 3. Which part of the film did you watch most carefully?
> 4. What are some occupations you saw in the film that you did not know existed?
> 5. Would you like to do any of the jobs you saw in the film?

b) evaluation procedures exist but no objectives are stated.

#5 If clear provisions are given for evaluating some of the stated objectives (60% or less) and no adaptations of material are necessary.

#7 If clear provisions are given for evaluating most (over 60%) of the stated objectives.

4.02 Materials flexible enough to meet the needs of special users are considered superior to those with limited use. Following is a list of those users who could be described as "special users."

Slow Readers
Ethnic/Minority
Educationally Disadvantaged
Mentally Handicapped
Physically Handicapped
Gifted/Accelerated

Select options as follows:

NA If option #1 or NA has been checked for item 4.01

#1 If none of the above listed users could use the evaluation procedures as they are presented or in any easily adapted form.

#3 If one to four of the above listed users could use the evaluation procedures as is or in an easily adapted form (e.g., a written questionnaire could easily be administered orally to a blind student).

#5 If the evaluation procedures can be used either as is or in an easily adapted form by nearly all of the above listed users (5 or 6), or if the material specifies procedures for 1-3 special users.

4.03 For the purposes of this item, diagnostic pretesting is 1) any evaluative procedure used to identify who should use the material or 2) any evaluative procedure used in conjunction with a posttest to determine the value of the material.

Posttesting is defined as an evaluative procedure administered at the end of material use and designed to assess the effects of the material on the user. This is covered in 4.01

Select options as follows:

NA No posttest

#1 If there are no pretesting procedures provided and if discussion questions, for example, cannot be adapted to serve as pre- and posttests.

#3 If recommendations for pretesting exist but no procedures are given, or if discussion questions, etc., can be adapted for use as pretests.

#5 If provisions are set forth for pretesting with no adaptations needed and the topics covered on the pretest do not parallel those on the posttest.

#7 If provisions are set forth for pretesting with no adaptations needed and the topics covered on the pretest are clearly parallel to those on the posttest.

4.04 Remediation procedures are techniques to be used in aiding the user to learn material that has not been learned. Posttest results would show whether or not the user needs remediation.

Select options as follows:

NA If there are no provision for posttesting and none could be adapted.

#1 If posttesting provisions are supplied or adapted but no remediation procedures are identified or suggested.

#3 If remediation procedures are suggested but no clear directions are provided for their application. For example:

a. A material states that if students fail to achieve any or all the stated objectives, remediation should take place.

b. Material states that if a user fails to achieve all the objectives, the material should be reviewed by the user.

#5 If remediation procedures exist and specific directions are given for their application. For example:

a. For each objective, material lists alternative instructional activities to be used if the user fails to achieve those objectives as indicated in the posttest.

b. Material states that if items are missed on the posttest, then specific sections in the material should be reviewed.

c. Material states that individual instruction using specific material should be given to users who fail to achieve stated objectives.

SECTION 5.

5.01 Instructional strategies can often be found in more than one area of the material. They may be 1) suggested at the beginning of the unit, 2) implied by the nature of the material, 3) suggested in follow-on or post-material activities, or 4) suggested within the body of the material.

Possible instructional strategies include:

a. Self-instruction
b. Programmed instruction
c. Discussion (group or panel)
d. Individualized projects
e. Simulation or gaming
f. Psychodrama
g. Role playing
h. Field trips
i. Demonstrations
j. Drill and practices
k. Supervised work experiences
l. Psychomotor activities
m. Manipulative skill development

Select options as follows:

NA For all non-instructional material (resource books, program planning guides, etc.)

#1 Only one of the above is suggested or implied as an instructional strategy.

#3 2 to 4 of the above are suggested or implied as possible instructional strategies.

#5 5 or more of the above are suggested or implied as possible instructional strategies.

5.02 Organized learning can take place in a variety of situations. A material that can be utilized in a number of organizational situations would be considered more versatile than one limited by its nature to one or only a few situations. Possible organizational patterns are:

a. large group instruction
b. small group instruction
c. open school situation
d. unique grade organization
e. extra curricular setting
f. modular or flexible schedule
g. community organization based classroom (youth groups, Sunday school, recreation centers, etc.)
h. industry-based classroom
i. business-based classroom

Select options as follows:

NA For all non-instructional materials (resource books, program planning guides, etc.)

#1 The material could be used in only one of the above settings.

#3 The material could be used in 2 or 3 of the above settings.

#5 The material could be used in 4 or more of the above settings.

5.03 A material that can be used in situations using alternative staffing patterns would be more versatile than a material that could only be taught using the standard one teacher staffing pattern. Alternative staffing patterns include:

a. Team teaching
b. Low pupil-teacher ratio
c. Paraprofessional support
d. Peer student support
e. Special support personnel
f. Specially trained instructor

Select options as follows:

NA For all non-instructional materials (resource books, program planning guides, etc.)

#1 The material could be successfully adapted to only one of the above staffing patterns.

#3 The material could be successfully adapted to 2 or three of the above staffing patterns.

#5 The material could be successfully adapted to 4 or more of the above staffing patterns.

5.04 Materials that can effectively use other media as aids to the instructional process are more versatile and more likely to stimulate student interest than those relying on only one media source. Suggestions for possible use of other media might be found 1) in the introduction to the unit, 2) within the material, or 3) in suggested support or follow-on activities.

Media categories are:

a. Films (films, filmstrips, slides, videotapes)
b. Printed materials
c. Audio-visual (records, audio tape, cassette, transparencies, etc.)
d. Manipulatives (puzzles, games, tools, blocks, etc.)

Select options as follows:

NA For all non-instructional materials (resource books, program planning guides, etc.)

#1 Only one media category is suggested by the material.

#3 Two media categories are suggested by the material.

#5 Three or four media categories are suggested by the material.

5.05 Materials must specifically suggest alternative activities for students with special needs. Students with special needs might include:

a. educationally disadvantaged
b. slow readers
c. mentally handicapped
d. physically handicapped
e. gifted

Select options as follows:

NA For all non-instructional materials.

#1 For material that does not suggest alternate activities for students with special needs

#3 For material suggesting alternate activities for one group of special students (e.g., slow readers), but not for others (e.g., physically handicapped)

#5 If the material specifically suggests alternative activities for more than one group of special students.

5.06 Although the typical learning situation involves a group of learners, it is becoming more and more obvious that many students require individual instruction. Select options as follows:

NA For all non-instructional materials (resource books, program planning guides, etc.)

#1 For a material that gives no specific suggestions for individualized instruction and is not easily adaptable. Examples of materials that would be difficult to adapt are:

a. a game requiring the participation of several students

b. a film with no suggested learning activities accompanying it.

#3 For a material that gives no specific suggestions for individualized instruction but would be easily adaptable. Examples of materials that would be easy to adapt are:

a. a textbook in which the exercise section is self-explanatory and able to be checked by the student (answers in the back).

b. an audio-cassette unit that can be manipulated by the individual student and adjusted to his/her rate of learning.

c. a material whose suggested activities could be performed as a project by an individual student.

#5 For materials that give specific suggestions or are specifically designed for individualized instruction. Examples are:

a. a workbook that is totally self-explanatory and designed for use by individual students without classroom support.

b. a unit that contains an exercise section for the individual student (e.g., "Exploring on your own")

5.07 Materials that can be used within a more comprehensive education program are considered more versatile than those that cannot.

Select options as follows:

NA For non-instructional materials that would not be used within the context of an "education program."

#1 If the material would or could be used as part of an "education program," but no suggestions are made for doing so.

#3 If the material suggests use of the material within a more comprehensive program, but states no clear provisions for doing so, (i.e., a material states that it could be used in conjunction with the teaching of traditional subject matter.)

#5 If the material gives clear provisions for use in a comprehensive program (i.e., a material states that the unit could be incorporated in a math class and states how it should be incorporated.)

SECTION 6

6.01 A material will either be self-explanatory or will provide directions to the user of the material. (User is defined to mean student, teacher, program planner, or any combination depending upon the group for which the material is designed.)

Select options as follows:

#1 If no directions are provided, but are necessary. Examples are:

a. an audio-cassette kit that is synchronized (the frame should be turned at certain intervals), but no directions are provided to enable the user to accomplish synchronization.

b. a workbook that can be used either in part or in total, with no directions included to assist the user in deciding which units can be omitted by which users.

c. a kit of several types of material, which gives no directions explaining the most beneficial way of coordinating use of the various components.

#3 When directions are included but cannot be followed by a person inexperienced with the material content. Examples are:

a. directions for unit written in technical jargon unfamiliar to a user inexperienced with the content. (Terminology is not defined for the user.)

b. directions are provided but are sketchy, vague, or unsatisfactory for guiding the inexperienced user of the material. (The directions assume knowledge based on former experience with the material content.)

c. directions are provided but refer to switches, units, graphs, etc., which are difficult to locate within the materials. ("Refer to Graph B while saying . . . ."--no indication of where Graph B can be found.)

d. directions are provided but contain faulty information ("Student should then answer questions on page 38"--No page 38 in manual or no questions on page 38).

#5 When a material:

a. clearly states directions in terms familiar to an inexperienced user, which facilitate successful use of the material

b. is organized so that no directions are necessary and correct use of the material is possible as dictated by the organization and format. (A film accompanied by a handbook listing pre-viewing and post-viewing exercises; a textbook with a standard and traditional organization; etc.)

6.02 In those cases in which the material cannot be successfully used by the student, teacher, or program planner without background information, that information should be provided in the material. Background information is defined as information other than that which a user would ordinarily have by virtue of his/her age, grade level, etc. (in the case of students) or training, education, etc. (in the case of teachers).

Select options as follows:

NA When no background information is necessary for successful use of the material.

#1 If the material requires background information not usually known by the intended user and not contained within the material. Examples are:

a. a workbook on the computer industry, which makes use of such terms as "programming," "terminals," or "keypunch" without supplying definitions or providing an explanation of the terms.

b. a film on the health professions with required activities assuming that the teacher has considerable knowledge of medical practices.

c. any material that provides exercises or discussions contingent upon information outside the scope of the material content.

#3 When necessary background information is indicated but not provided, or when background information is provided but is incomplete or inadequate for successful use of the material. Examples are:

a. a material that states: "Instructor should have a knowledge of the history of women in the United States."

b. a material that first asks the teacher to provide students with a history of the use of money, then presents student exercises. A brief outline of the history of money is provided in the teacher's manual but the student exercises require more extensive or specific information than the teacher can gain from the manual.

#5 When all necessary information for successful use of the material is contained within the material. For example:

a. all special terminology is defined or explained

b. all supplementary material for complete understanding of material content is provided.

c. discussion questions, exercises, etc., are based on information generally known or contained in the material.

6.03 The presumption of this item is that all materials benefit from identification and referencing of resource materials. Referencing is defined as annotating a resource material in such a way that it can be located by the user.

Select options as follows:

#1 When the material contains no references. Any material whose content stimulates a student to seek further information would benefit from identified resource materials.

#3 When resource materials are either mentioned within the body or listed at the end of the material, but are not referenced.

#5 When resource materials are identified and referenced in such a way that they can be located by the user or when a material is totally self-sufficient and cannot benefit from additional knowledge gained from other resources.

6.04 Materials that require additional training and/or skills on the part of the user should identify that training or skill in detail.

Select options as follows:

NA When additional training and skills are not required for successful use of the material. This option should also be marked when necessary additional training is obvious. (It would be obvious that a teacher must know Spanish in order to teach a bilingual English/Spanish material.)

#1 When additional training or skills are required for use of the material but the nature of the training or skills is not identified. Examples are:

a. a material followed by exercises involving psychodrama. In order to help students perform the exercise with success and without danger, the teacher must be experienced in the use of this instructional strategy. Failure to identify this training as necessary would prohibit full use of the material.

b. a complex program planning guide that does not state that its user be minimally experienced in program planning.

c. c. a material which contains three songs that the teacher must teach the students. Music-reading skills are not identified as necessary for successful use of the material.

d. a material which contains library research exercises. Ability to locate materials within a library is not identified as a necessary skill.

#3 Additional training and skills necessary for successful use of the material are identified but are in insufficient detail. For example:

a. the material states that the student must have math skills. The level of skills (basic, intermediate, etc.) is not detailed.

b. the material states that the instructor should be able to demonstrate the use of office machines. The types of office machines are not specified.

#5 When required skills are identified and outlined in detail. For example:

a. The material states that the teacher should be able to promote simulation exercises by assuming a role and acting as a role model for the students.

b. The material states that a student should be able to identify his/her own personality traits and relate them to qualities desirable in certain occupations.

c. The material states that the teacher should be able to play simple 5-note songs on the piano.

APPENDIX F

In-Depth Interviews in Special Sample Districts

The national school district survey was supplemented with personal and telephone interviews with individuals in 16 specially selected school districts. These districts were selected from those nominated as exemplary by the Director of the Office of Career Education, the head of the National Advisory Council for Career Education, and a member of the National Advisory Council for Career Education. These school districts were deemed to have made significant contributions to the development of career education, and it was felt that their experiences would be valuable to others implementing career education. As a protection to the respondents in each district, identifying information has been deleted. The 16 exemplary school districts are listed below.

- Anne Arundel, Maryland
- Atlanta, Georgia
- Cashmere, Washington
- Covina, California
- Dade County, Florida
- Dallas, Texas
- Des Moines, Iowa
- East Baton Rouge, Louisiana
- Elkhart, Indiana
- Los Angeles, California
- Portland, Oregon
- Royal Oak, Michigan
- Salt Lake City, Utah
- Santa Barbara, California
- Syracuse, New York
- Warren, Ohio

Onsite visits were conducted at two of the 16 school districts; the information from the other districts was collected via telephone interviews. Topic areas for discussion were developed, but the specific questions differed from one site to the next, or from person to person at a given site, depending on the local program and the group the person represented.

The persons contacted were classified into 18 categories, as is indicated in Table 3.18 in Chapter 3. A total of 329 persons were interviewed, with a range of 13 to 34 persons per district. This appendix contains a summary of the interviews from each of the 16 school districts, with the opinions of community representatives, school personnel, and students reported separately. A summary of the opinions across these school districts is contained in Section 3.10.

Special Sample District #1

Demographic Data

The district, which surrounds and includes a large metropolitan city, has several hundred schools with a total enrollment of over 200,000. Approximately 42% of the students are white, 30% have Spanish surnames, and 27% are black. Native American and oriental students complete the total.

The economic status of the families residing in the district ranges from levels of poverty to extreme wealth. However, the approximate median income of the area is $10,000.

Summary of Career Education Activities in the District

The career education staff consists of 11 full-time workers. A number of other teachers are involved to some degree, but only a handful have participated in career education staff development activities; however, guidance personnel are involved throughout the district. The district's advisory committee for career education is composed of teachers, parents, students, administrators, and business representatives. Evaluation of the program was conducted by a third party.

At the elementary level, career awareness and simulation activities have been integrated into the regular curriculum, and there are additional activities at the Career Laboratory. The junior high level has continued this integration and also has provided exploratory programs focused on opportunities and requirements of specific careers. The high school program was designed to permit student specialization in a variety of career clusters, while the postsecondary objectives of vocational and general adult education were designed to stress basic skills and training and retraining in vocational areas, as well as to assist adults in their efforts toward self-improvement. In addition, differences between vocational and academic curricula have been deemphasized, and special efforts have been made to fulfill the career education needs of physically and mentally handicapped students and of minority students.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved in the developmental stages of the program, including curriculum design and staff training, and in awareness, exploration, and vocational activities. Community representatives were made aware of the program as parents, as school board members, as advisory committee members, and through local service organizations.

What are the strengths of the program, and why do you think it is a success?

Both community representatives and school district personnel said that the enthusiastic support of the central office personnel, administrators, staff, and students contributed to the success of the program. School personnel pointed out that teachers were well-equipped to teach career education since many of them had had direct experience with other kinds of work; they also said that outside resource people had been helpful in teaching students about careers. The community representatives said that the dedication of the career education staff and the support of the general community contributed to the success of the program.

School personnel praised practices such as hands-on activities, the individualization of the program, and the sequentially organized career education units. Community representatives cited role-playing at the elementary level as a particularly useful practice. Both groups said that the infusion of career education concepts into academic subjects and the relationship drawn between the world of work and the skills being developed contributed significantly to program success. The elementary and junior high level career education programs drew special praise from both groups.

School personnel and community representatives noted that the career education programs helped some students eliminate careers they found to be unattractive and thus concentrate more seriously on their viable options. They also cited the increased number of students leaving high school with marketable skills. Community members praised the fact that the development of basic skills had not suffered as a result of the program. They also said that career options for women were being expanded through the elimination of sex-stereotyping in career education.

What are the weaknesses and problems in the program? What changes would you like made in the program?

The majority of those interviewed mentioned the need for more funds for obtaining additional staff amd materials, for continuing program development, and for district-wide expansion of the program. However, a few people said they thought that greater emphasis on improved program design and on staff committment, rather than expanded budgets, would improve the overall quality and success of the program.

Both groups said that more resource people should be used. In addition, school personnel stressed the need for improved career education materials and for more hands-on activities. Infusion of career education into the regular curriculum was proposed by community representatives, and they agreed with school personnel on the need to broaden the scope of the curriculum at each grade level. Lack of communication was a problem cited by both groups; school personnel said it hindered coordination of inter- and intra-school career education activities, while community representatives said that program development suffered as a result of poor cummunication between the business community and the school district. Some community representatives mentioned the need for early evaluation of students' career potentials and for the development of marketable skills. Greater support from administrators was sought by both groups; community representatives wanted them to prevent diversion of career education funds to other programs, while school personnel claimed union contracts ("last hired, first fired") had resulted in the loss of innovative teachers.

Many respondents cited lack of understanding and acceptance of career education concepts by the administration, staff, and public as a major cause of slow program development. One example given by a community representative was that many guidance counselors are reluctant to shift from their traditional college-preparatory orientation.

Do you know of any community-based career education activities?

School district personnel mentioned a local skill center and Junior Achievement.

Special Sample District #2

Demographic Data

The district has several schools with a total enrollment of over 1,000. It serves a community which is almost totally white and has incomes ranging from $5,000 to $50,000, with a fluctuating median income.

Summary of Career Education Activities in the District

Career education in this district has become an integral part of the total curriculum. The program began with a Federal project in 1973, funded by Title I funds awarded jointly to the district and a neighboring school district. Every teacher in the district participated in career education staff development activities. As a result, the teachers developed techniques and materials that complemented the existing school curriculum; these materials were tested and bound into Career Education Activity Guides. A Career Education Community Advisory Committee was formed, with members representing various career areas.

When the Federal funds terminated in 1974, additional State funds were secured for the purpose of making the project available to other districts. Eleven teachers were trained to serve as a resource team, making the district a career education demonstration site in the State. All aspects of the dissemination phase were evaluated by a third party.

Career education techniques cover the spectrum from awareness activities to Career Fairs to the use of guest speakers from the business community; in addition, the district provides hands-on experiences showing students the "inner workings" of various jobs.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved in all stages of the program from its design and development, including application for funds, through its implementation in the classroom. Involvement from outside the school came in the form of resource persons and attendance by community representatives at career education meetings.

What are the strengths of the program, and why do you think it is a success?

A great deal of value was placed, by both school personnel and community representatives, upon the complete involvement and strong support of the staff, students, and especially the community. They said the program had benefited from the availability of adequate funds, good resource people, and well-developed career awareness and hands-on activities. Additionally, school personnel thought that the integration of the program into the regular curriculum, parents' attendance at career fairs, and the use of films in the classroom strengthened the program. The existence of the vocational curriculum was cited as valuable by a community respondent.

Development of career awareness in students and their ability to more easily grasp the relevance of schoolwork to the outside world were mentioned by both school personnel and community representatives as valuable outcomes of the career education program.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Respondents from the school district and the community agreed that additional money was needed for inservice staff development, particularly to permit more teacher released time for curriculum development. Community representatives were unhappy that more time was being devoted to students with problems than to the better students. They also felt that the younger students might have been overwhelmed by the large number of career options presented to them.

Several people in the two groups emphasized the need for improved publicity and communications, which were needed to increase participation by parents, community colleges, and local resource persons. These respondents also felt that the program would benefit from further integration into the regular curriculum and increased implementation at the high school level. Some interest was expressed by a community representative in more evaluation of the impact of career education. Another person said that career education was interfering with the teaching of basic skills. Lastly, some teachers were thought of by their fellow employees as not fully understanding the concepts of career education.

Special Sample District #3

Demographic Data

The district has about 110 schools, with an enrollment of over 60,000. Approximately 83% of the students are white and 13% black; in addition, there are small numbers of native American, oriental, and Spanish-surname students.

The district serves a city with a population of nearly 400,000. About 60% of the families earn between $5,000 and $15,000. The annual income of 20% is less than $5,000, and another 20% have an income of over $15,000.

Summary of Career Education Activities in the District

The district's career education staff consisted of five full-time workers and several part-time career education coordinators. Funding was from local, State, and Federal sources. In 1971, the board of education adopted a formal written policy regarding career education in the district. The advisory committee for career education included teachers, administrators, parents, and representatives from business, labor, industry, local government, and community service organizations.

All of the district's work experience coordinators participated in career education staff development activities, although very few of the teachers or guidance personnel participated in such activities.

Career education techniques included Career Center activities, guest speakers from the business community, and on-the-job work experience for credit. The schools in the district have offered credit toward graduation on the basis of student performance evaluation and for learning and work experiences outside the school. They have also provided an adult education program and a limited open-entry/open-exit approach, so that students could leave school to work and return in accordance with their needs and educational motivation. In addition, the school district made special efforts to address the career education needs of the physically handicapped, ethnic minorities, and women.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

Almost all of the school district employees were involved in career education in the capacity of teacher, counselor, or supervisor. Community representatives were involved in a variety of ways: as resource people, as curriculum planners and advisors in staff development and administrative activities, and as instructors of the handicapped.

What are the strengths of the program, and why do you think it is a success?

A clear understanding of the career education concepts, with the resultant support and enthusiasm shown by the program's staff and coordinators, the district's teachers and administrators, and the community in general, were cited as very important by both school and community respondents. Good communication was also cited as a positive influence; school district personnel said the communication between schools was good, and the community representatives said there was a strong liaison between the district and the State education agency, and between the business community and the students.

Both groups of respondents said that the use of outside resource people and the outlining of a clear connection between education and the world of work were important techniques in the district's career education program. School district personnel went on to support the value of the progression from career awareness (elementary level) to career exploratory (secondary level) activities, while community members cited the positive results of having a career education coordinator in each school. The latter group also thought that inservice training and work with the Institute of Public Affairs Research were helpful. Community members said that students become motivated and enthusiastic because of the career education program, and they felt that they were learning about many career options and the skills requisite for each of them.

What are the weaknesses and problems in the program? What changes would you like made in the program?

School district personnel thought that more funds were needed for released time for teachers, and they expressed concern that some funds, designated for career education, were being channeled into other programs. Community members said that additional funds were needed to improve career education facilities and to solve the students' transportation problems.

One problem noted by both groups was that career education was not sufficiently infused into regular classroom work. Community members also pointed out that counselors were still geared to directing most students to college, and they said that there was a definite need for counselors and teachers to be involved in more inservice training to alleviate that problem. They also called for more hands-on activities, additional resource people in the classroom, and a general increase in career education activities. Some problems cited by the community members were that women and minorities were being tracked into traditional roles, that the handicapped were not being exposed to career education, and that career education was simply not reaching all students.

In contrast to opinions discussed earlier, a few members of the two respondent groups thought that administrators and teachers were not sufficiently committed to the career education program because they did not understand career education concepts. Communication between the schools and the business community was also thought to be less than adequate.

Community members thought that more support and commitment were needed from principals, counselors, parents, and the business community.

Do you know of any community-based career education activities?

There were none mentioned by school personnel. Community people listed IPAR (assists schools by contacting resource persons), Explorer Scouts, and CEDAR program.

Special Sample District #4

Demographic Data

The district has more than 40 schools, with a total enrollment of over 25,000. Approximately 70% of the students are white, with blacks comprising most of the remaining school rolls.

The district serves a city with a population of almost 200,000. Median income of the area is approximately $8,000.

Summary of Career Education Activities in the District

The career education staff consists of 10 full-time workers, supported by a combination of Federal, State and local funds. The staff developed a formal career education policy beginning in the 1972-73 school year, and the program has undergone evaluation by an independent contractor. The district's advisory committee for career education includes teachers, counselors, administrators, parents, and representatives from business, labor, and industry.

The district has implemented career education at all grade levels, with the greatest emphasis, in terms of both student and personnel involvement, at the elementary level. The district reported that 100% of the teachers, counselors, and administrators at the elementary level had participated in staff development activities; that figure applied as well to counseling staff at the middle and senior high levels. In almost all cases, only teachers were involved in the presentation of career education activities to the students. All of the usual techniques for such instruction were employed plus computer-assisted instruction.

The district has implemented several of the educational practices championed by the U. S. Office of Education, including de-emphasis on assigning students to differentiated curricula, awarding credits based on student performance evaluation and for outside learning experiences, and providing an open-entry/open-exit educational system. Additionally, they have provided an adult education program, and have made special efforts to meet the career education needs of the handicapped, ethnic minorities, and women.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved in curriculum and staff development and in coordination and implementation of career education activities. About half of the community representatives were involved as resource people. Other involvement included liaison activities, development of hands-on experiences, and contacts made as parents and board members.

What are the strengths of the program, and why do you think it is a success?

Community representatives stated that the cooperation between the school district and business/labor/industry groups helped make the program a success, and they also endorsed the contributions to the program of the Community Council on Careers. Other respondents said that the enthusiasm of the staff was an important factor in the program's success.

School district personnel mentioned many different techniques and activities that had contributed to the program's success. Among those cited were a computer program at grade levels nine through twelve, guest speakers, a Career Center, a special career education section within each school's library, and materials geared to different ability ranges within each class. The infusion of career education into the regular curriculum (K-6), thus relating school subjects to the world of work, was also praised, as was the strong emphasis on career exploration activities. Some students received exploratory experience and skills training at the district's alternative school, which also offered a program for disadvantaged children. The feedback received from teachers and community members was thought to be an important factor in program planning, as were contributions from the National Organization for Women (NOW) in the revision of the curriculum to eliminate sex-stereotyping. Lastly, the availability of inservice training for all teachers was said to be a strength, although some respondents felt that more inservice training was needed in order to overcome the misunderstanding of career education concepts by some staff members.

Community members also supported the career exploration activities and guest speakers, and went on to endorse the use of career guidance counselors, career fairs, and unpaid work experience in school offices. School district personnel felt that the teaching of self-assessment and job-getting skills provided important student outcomes, while community representatives supported the development of student awareness of future career needs and the world of work in general. The latter group also endorsed the board of education's mandate that all students leave school possessing marketable skills.

What are the weaknesses and problems in the program? What changes would you like made in the program?

The lack of funds was cited several times by both school district personnel and community representatives. They felt that program development was hindered by this; additional materials and staff were needed but were unaffordable. One community respondent felt that money had been spent inappropriately and that materials had been wasted. Others felt that more time was needed for resource activities, and that the services of a native American counselor would be beneficial.

One school district employee complained that the program created extra work for teachers. A community member offered a partial solution: development of a student workbook to save both time and paper. Other community members stressed the need for more practical experiences and for mandatory consumer education for high school students. Both groups voiced a need for more resource outlets.

Another problem often cited by both groups was the lack of an effective evaluation instrument and procedure. Some community respondents thought that career education inservice training should be made mandatory, because some school personnel did not understand the concepts and goal of career education and therefore were not supportive of the program. Others hoped to obtain personnel having wider outside work and field experience. One community person said that more long-range planning was needed to determine future employment needs, and another felt that possession of two marketable skills ought to be required of all graduates. Poor communications, both with the community and between local school districts, was also said to be a point of weakness.

In addition to the long-standing problem of overemphasis on a college-bound orientation, this district was also having problems of a more unusual nature, according to some community persons. Some difficulty was encountered in convincing minority students of the need to develop a skill, and some students learned through peer pressure that it was "not cool" to be involved in certain career education activities.

Do you know of any community-based career education activities?

School district employees and community representatives mentioned the Explorer Scouts, Junior Achievement, 4-H clubs, and the EOC Regional Learning Center.

Special Sample District #5

Demographic Data

The district has about 40 schools, with a total enrollment of nearly 30,000. Approximately 58% of the students are white, 28% are oriental, and 10% have Spanish surnames. Blacks, native Americans, and others make up 3%.

The district serves a city with a population of over 170,000, with an approximate median income of $12,000.

Summary of Career Education Activities in the District

The career education staff consisted of 10 full-time workers, supported by funds from the vocational education budget. In 1974 the board of education adopted a formal policy regarding career education in the district; informal evaluations were made, with more in the planning stages. The district had an advisory committee for vocational education, which dealt with the topic of career education.

Over half of the elementary school teachers participated in staff development activities, and 80% of the junior and senior high school guidance personnel also participated in such activities.

Career education techniques included Career Center and Career Fair activities, guest speakers from the business community, and on-the-job work experience for credit. The schools in the district have de-emphasized differences between vocational and academic curricula and have offered credit toward graduation on the basis of student performance evaluation and for learning and work experiences outside the school. They have also provided for adult continuing education and have made special efforts to address the career education needs of the physically handicapped, ethnic minorities, and women.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School personnel were involved in the developmental stages of the program, and many served as counselors or directors of either career education or vocational education classes. Community representatives became acquainted with the program in a variety of ways, the most common of which was the PTA. They also served as school board members or as teacher's aides and were thus exposed to the implementation of the program. Others were made aware through the career education advisory committee, manpower, and task force meetings.

What are the strengths of the program, and why do you think it is a success?

Community members and school personnel cited the commitment shown by the outstanding staff. School personnel also said that administrative support was an important factor.

Both groups said that the availability of good materials and facilities were valuable assets in implementing the program. Community representatives said that the well-organized program infused into the regular curriculum stimulated early career consideration and encouraged students to follow through with a highly coordinated set of sequential learning activities from grades K-12. Students were exposed to jobs from all career clusters.

According to both school personnel and community representatives, everyone--teachers, students, and parents--was made more aware of the many career opportunities available in today's world of work. It was noted that students were leaving school with marketable skills and were often able to apply them soon after graduating. Community representatives commended the career education program for giving students practical experience, promoting good study habits, and preparing them for career decision-making.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Both school district personnel and community members thought that a lack of funds had prevented needed expansion of the program and the hiring of additional staff. Community members thought that the career education materials needed to be improved and updated and that facilities should be expanded. School district personnel, however, felt that money problems were partially due to improper utilization of the available career education funds.

Some school employees said that career education needed to be more closely integrated with the regular curriculum. They felt that teachers with business backgrounds would be better able to teach career education; they also wanted to see students involved in policymaking. Community representatives wanted a greater emphasis on career education concepts at the elementary level, and they thought high school students should be involved in more work experience programs. Additionally, they wanted a good follow-up program to evaluate the effects of career education on the lives of graduates. Problems cited by both groups were that counselors and teachers were more interested in the college-bound student, that there were not enough minority students and teachers involved in the program, and that there was not a tight sequential progression of career education from K through 12.

Both school district personnel and community representatives said that more publicity was needed in order to gain full support for the career education program, especially, as school personnel noted, because some parents, students, and teachers were not convinced of the importance of career education.

Do you know of any community-based career education activities?

Organizations that provided career education activities were BICEP, Manpower, Boy Scouts, Chamber of Commerce, a local church, Project Cooperation, OCI, Urban Crossroads Center, Blacks Unlimited, and a community center.

Special Sample District #6

Demographic Data

The district has more than 70 schools with a total enrollment of over 40,000. Approximately 88% of the students are white, 9% are black, and the remaining are listed as Spanish surname, native American, and oriental. The city served by the district has a population of over 200,000.

Summary of Career Education Activities in the District

The career education staff consisted of two full-time workers, supported by a combination of local and Federal funds. In 1971 the board of education adopted a formal policy regarding career education in the district. The program underwent evaluation utilizing teacher and student ratings and standardized tests. The district's advisory committee for career education included administrators, parents, students, and representatives from community service groups, business, labor, and industry. Only a limited number of teachers and guidance personnel participated in staff development activities in 1974; however, there were at least a few such persons from each of the district's three grade levels.

In the 1974-75 school year the district de-emphasized differences between vocational and academic curricula. It offered credit toward graduation on the basis of student performance evaluation and for learning and work experiences outside the school, and it provided for adult continuing education. In addition, the district made special efforts to address the career education needs of the mentally retarded and physically handicapped.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were aware of the career education program because their duties as teachers, counselors, resource people, staff developers, and administrators included some specific involvement. Community representatives learned about it in a variety of ways--through attending school board or PTA meetings; by serving on the advisory committee or as an evaluator, resource person, or manpower specialist; and through contacts with students. One community member provided financial support for some activities.

What are the strengths of the program, and why do you think it is a success?

Community representatives and school personnel commended as outstanding the work of the career education coordinator, as well as that of the advisory committee, which was composed of business/industry representatives. They also mentioned the strong support by the parents and the community and the commitment of district and school administrators. School district personnel said that the excellent resource people were an asset to the program, and community people cited the dedication of the career education staff and the involvement of the local community college in some of the program activities.

The two respondent groups thought that the comprehensive nature of the career education program was a major point of strength. Specifically, they mentioned the infusion of career education concepts into all grade levels, the incorporation of all 15 career clusters, and the use of many hands-on awareness and exploratory experiences. They also supported the use of the Career Center, career films, and equipment in the program. Some school personnel felt that the presence of a career education coordinator in each building had helped keep the program organized.

Community representatives thought that the program had produced many positive effects on students. They were learning about career options, education became more relevant because of the explicit connection made between the world of work and school, and career education offered something new to the non-college bound, vocationally oriented student. Many students who might not otherwise have finished school graduated because career education had made education more relevant for them.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Funding was a big problem. Both school personnel and community members thought more money was needed for materials, staff, inservice and preservice training, and for the career education program overall. School personnel felt that teachers needed more work time for developing their career education curriculum and that the coordinators in each school should not have any teaching responsibilities.

According to both groups, there were several problems relating to the focus of the program. Community representatives thought that there should be a more balanced presentation of all kinds of careers, a stronger focus at the elementary level, more uniform treatment of low achievers and high achievers, and a renewed emphasis on the basic skills. They also thought that there should be more thorough and objective procedures for program evaluation, including both pretesting and follow-ups, as well as increased availability of hands-on experiences. Also, both groups mentioned that non-college bound students were still not receiving enough attention.

Community members said that many people still confused the concepts of vocational education and career education. Better communication with parents, business/industry, and the general community was needed in order to increase their participation. Both groups said that educators, in many cases, did not embrace the concepts of career education, and school personnel felt that more support was needed in particular from area supervisors.

Do you know of any community-based career education activities?

Both groups mentioned the Explorer Scouts, Junior Achievement, YMCA, YWCA, the military, and CEDAR.

Special Sample District #7

Demographic Data

The district has about 100 schools, with an enrollment of over 50,000. White students comprise over 85% of the district rolls, with most of the rest listed as black and a few listed as other. The median income is approximately $12,000.

Summary of Career Education Activities in the District

The board of education adopted a formal policy with regard to career education in the 1970-71 school year. The program was begun with local, State, and Federal funds. The 1975-76 school program is supported by local and Federal funds and has a full-time staff of 13.

Career education has been implemented at all grade levels. About 90% of the guidance staff, 25% of the administrators, and 20% of the teachers have participated in career education staff development activities. Program evaluation, carried out in 1974-75, used standardized tests, expert judgments, and teacher ratings.

Differences between vocational and academic curricula have been deemphasized, and college-bound students have been encouraged to enroll in vocational education classes. The district has provided for adult and continuing education and for an open-entry/open-exit approach so that students may leave school to work and return in accordance with their needs and educational motivation. In addition, the district has made special efforts to address the special career education needs of the mentally and physically handicapped and other disadvantaged students.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved in the program as a part of their regular duties. They helped with the design, development, and implementation of the program, and they served as teachers, counselors, and task force members.

Community representatives learned about the program through serving on the school board and through contact with students participating in it. They were involved in the establishment of goals and objectives and assisted with various program activities; they served as resource persons, staff development specialists, consultants, and evaluators.

What are the strengths of the program, and why do you think it is a success?

Both school district personnel and community representatives said that one of the major strengths was the infusion of career education into the regular curriculum at all grade levels. In addition, they said students were interested in the program, and were exposed to a variety of career options through the career awareness activities. Dedicated staff and resource persons were other assets mentioned.

School district personnel said that the structure, based on the concept of self-career-society-technology-change, made the program a success, along with the fact that it was performance-oriented. Administrative support, availability of volunteers and materials, and the work program utilizing telephone follow-ups of employers also helped make the program a success.

Community representatives said the program has been a success because it was started with local funds and local interest, research and development were carried out prior to its inception, and it related to the needs of the district. The community was involved, outside resources were utilized, and educators were provided first-hand knowledge of the job market and people in these jobs. Students learned how to make career decisions and were offered an alternative to college. Hands-on activities were practical, and graduates have succeeded in the world of work.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Both school district personnel and community representatives mentioned the problem of getting teachers, parents, and the community to understand and accept the concept of career education and its relation to basic course study. Some of the teacher resistance was related to not understanding the program, while other teachers were afraid it meant more work for them. Lack of evaluation data was another major problem. In addition, the need for expanding the exploratory section and for providing more hands-on activities for students was mentioned.

Both school district personnel and community representatives pointed to the need for more funds, particularly for additional staff such as aides, teachers, and an instructional coordinator. School personnel said funds were needed for inservice training, for released time for teachers, and for more vocational programs. Community representatives said that another career center was needed.

School employees mentioned a variety of other problems. Career education was competing for attention with other new programs, and it did not reach enough students. The junior high and senior high programs were not fully developed and should be expanded, and more emphasis should be placed on career awareness at the elementary level. Other needs mentioned were more teacher, parent, and community participation, earlier involvement of key decision-makers, and providing for leadership at individual schools.

Community representatives mentioned that students should have more direct contact with resource persons and should be exposed to a wider range of career options. The program should take advantage of all resource opportunities, including those offered by the community college, and there should be better communication between school district and city government personnel.

Do you know of any community-based career education activities?

Both groups mentioned the Explorer Scouts, and school district personnel mentioned the YMCA and the community college program.

Special Sample District #8

Demographic Data

The district has over 100 schools, with a total enrollment of about 70,000. Approximately 60% of the students are white and 38% are black. Native American, oriental, and Spanish-surname students make up the remaining 2%.

The district serves a city with a population of over 180,000. Income levels range from $4,000 to $50,000, with an approximate median income of $11,500.

Summary of Career Education Activities in the District

Career education techniques used in this school district included Career Center activities, guest speakers from the business community, and on-the-job work experience. In 1974, the schools in the district de-emphasized differences between vocational and academic curricula, offered credit for learning and work experiences outside the school, and provided for adult continuing education. In addition, the school district made special efforts to address the career education needs of both gifted and mentally retarded students.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district employees were aware of the program because their duties as teachers, counselors, and administrators included some specific involvement. Many community representatives learned about the program through the news media. They were involved in a variety of ways--through participation in planning and staff development activities, as advisors, volunteers, resource persons, or employment specialists, and through attendance at school board or PTA meetings.

What are the strengths of the program, and why do you think it is a success?

Community members and school personnel agreed that the outstanding staff, made even more effective through the district's excellent inservice training, contributed greatly to the success of the program. Community respondents cited the work of the career education coordinator and the support of the administration and school board. They also mentioned the strong community support, attributable perhaps to the career education newsletter and other effective publicity efforts.

Both groups mentioned the excellent materials and equipment being used in the program. School personnel thought that exploratory hands-on exercises, job placement, and the health and child care component were particularly successful. Community members commended the program for meeting the needs of industry, infusing career education into the regular curriculum, and attempting to avoid the tracking of minorities and handicapped students.

Both groups said that students had appeared to be more motivated since the career education program was adopted; they were seeing the relationship between time spent in the classroom and the world of work, and they were becoming more future-oriented and responsible for their own development. School personnel noted that students had benefited by learning about career options and their own interests. Community members felt that the program was helping students become aware of non-college careers and was giving them a more positive attitude toward these careers.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Both school personnel and community members thought that increased funding was necessary in order for the program to continue to be successful. Limited materials and facilities had been a handicap, and according to school district personnel, acquiring more resource outlets was a high priority. Community people thought that the lack of funds was preventing the hiring of the additional staff needed, especially black administrators and teachers.

School personnel said that the program did not reach students at a young enough age and that perhaps it should be initiated at the ninth grade level instead of the tenth. They also recommended that resource people be utilized more often. Both groups felt that more hands-on activities should be provided, and they recommended expanded teacher-training activities. Community members felt that the program needed to be generally expanded and more thoroughly infused into the regular curriculum. The needs of certain minority groups were not being met: blacks were still being tracked into lower skill areas, special education students were not receiving enough attention, and the interests of non-college bound students were being neglected to some extent. Some community representatives felt that guidance counselors were not infusing career education concepts sufficiently; they also felt that more emphasis should be placed on job-getting skills such as resumé writing. Some also thought that there was too much emphasis on career education concepts at the elementary level.

Both school personnel and community representatives thought that a serious problem was the lack of commitment on the part of teachers, other staff, and community people. Community members noted specifically that the superintendent and the community were not strongly behind career education concepts. They said that both the public and the educators were still confusing vocational education with career education and that better communication with parents, educators, and the business community could improve this situation.

Do you know of any community-based career education activities?

Most school district personnel said no. However, community representatives mentioned the senior scouting program, churches, and State programs.

Special Sample District #9

Demographic Data

The district has over 20 schools, with a total enrollment of over 130,000. Approximately 66% of the students are white and 23% are black; oriental and Spanish surname students complete the total.

The district serves a community with a population of over 60,000. Incomes of 55% of the families range between $5,000 and $15,000; 19% earn between $15,000 and $20,000; 16% earn less than $5,000; and 10% earn more than $20,000.

Summary of Career Education Activities in the District

The career education staff consists of 10 full-time and 14 part-time workers, supported by State funds. In 1970, the board of education adopted a formal policy regarding career education, and the program was evaluated by the U.S. Office of Education and Rand Corporation. The district's advisory committee for career education includes teachers, administrators, parents, and representatives from business, labor, and industry.

The district has taken many steps toward implementing career education at all grade levels. All of the guidance personnel have participated in career education staff development activities, and 75% of the teachers have received staff development training. Career education techniques cover the spectrum from Career Center activities, to use of guest speakers from the business community, to on-the-job work experience for credit.

In 1974-75, this district offered credit for outside learning experiences and a continuing education program for adults, and special efforts were made to meet the career education needs of its mentally and physically handicapped, gifted, and women students. It was also effecting a deemphasis of the tendency to track students into sharply differentiated types of curricula.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

All of the school district employees contacted were aware of the program because their duties had included some specific involvement, whereas community representatives had become involved through PTA meetings, as resource persons, and through contact with students exposed to career education.

What are the strengths of the program, and why do you think it is a success?

Both school personnel and community representatives said that the high degree of staff committment and enthusiasm was a major strong point of the program. Community members went on to praise the strong leadership and to praise the students for their overall reliability as well as their participation in specific programs, such as career education for the handicapped.

School personnel said that the implementation of the program has the benefit of good organization, a logical sequence of activities, and effective communication and coordination between the schools, local businesses, and the community in general. They also cited the value of good materials and informative resource persons. Community representatives also mentioned the value of the resouce persons and, in addition, said they thought a valuable tool existed in the availability of practical means for learning about work, including opportunities for both observation and hands-on experiences. Such experiences were also made available to the faculty members to improve their teaching capabilities and were thought by the community to have been helpful,for school personnel expressed a variety of views about teacher inservice training for career education. Some thought it was a good, effective program, while others felt there was a need for more training, specifically to develop better concept understanding and acceptance by some reluctant staff members. Still others felt inservice training was needed just to improve general teaching abilities.

Both community representatives and school personnel said that they felt students were receiving good preparation for the world of work and exposure to a wide variety of career options. One community representative especially supported the presentation of non-college alternatives to students.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Both groups repeatedly expressed concern that the lack of funds was preventing necessary expansion of the program, not only at particular grade levels, but also at some district schools that as yet had little or no career education program. At least one staff person thought the program should be implemented through the adult education level; at the time it terminated at the tenth grade. Another person detected a weakness in the lack of follow-up assessments of program graduates. One community member said he felt that funds were being unequally allocated to individual schools, and another saw a potential problem with overcrowding at some onsite activities because of the increasing number of students in the program.

Some community representatives said the program could be strengthened at the personal level. Specifically, it was said that students with low self-concepts might not benefit as much as students with high self-concepts, and that therefore some efforts to develop such concepts should be made before the student was exposed to the world of work. In a related vein, it was suggested that guest speakers could discuss various aspects of "success and failure."

A need was expressed for more publicity regarding the concepts and goals of career education for the purpose of increasing cooperation and participation of all appropriate parties. Lastly, complaints from both school staff and the community centered on the problem of unbalanced utilization of resource outlets and duplication of career education efforts because of the large number of agencies involved.

Do you know of any community-based career education activities?

Both groups recognized Junior Achievement as the most widely utilized activity. Future Farmers, 4-H, YMCA, YWCA, the Urban League, and Explorer Scouts were also mentioned.

Special Sample District #10

Demographic Data

The district has several hundred schools, with a total enrollment of over half a million. Approximately 42% of the students are white, 28% are Spanish surname, 24% are black, and 5% are oriental; a small percentage are native American.

The district serves a large metropolitan area and several surrounding communities. There are many families whose annual income is less than $5,000; the median income is $11,000.

Summary of Career Education Activities in the District

The district has taken many steps toward implementing career education at all grade levels. All of the senior high and half of the junior high guidance personnel participated in career education staff development. However, only 20% of the high school teachers and an insignificant number of teachers from the junior high and elementary schools have participated in career education staff development activities. Guidance personnel and teachers are involved in career education at all grade levels. Career education techniques cover the spectrum from Career Center activities, to off-campus career experiences, to a personnel exchange program with the business community for teachers and counselors.

The career education staff consists of 55 full-time workers supported by the local school budget. In 1975, the board of education adopted a formal written policy regarding career education, and the program has undergone evaluation by a special school district team. Although there is no formally constituted advisory committee for career education, the committees for vocational education and curriculum address the topic.

Schools in the district have implemented practices such as awarding credit on the basis of student performance evaluation and for outside learning experiences and an open-entry/open-exit system that permits students to leave school to work and then return in accordance with their needs and educational motivation. They also provided a program of adult education as well as directed special efforts toward the career education needs of handicapped students, women, and ethnic minorities.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

The majority of school district respondents were involved in the design, development, and implementation of the program, with some of them also serving as resource persons. Community representatives participated as members of advisory committees. the school board, the PTA, and at task force meetings. Others became aware of the program through the mass media or because they were former students who had actually participated in the activities. Those students interviewed were aware because of their current involvement in the program.

What are the strengths of the program, and why do you think it is a success?

The following summary of responses includes those received from students currently enrolled in the district's schools; they were obtained during special onsite visits.

The support and enthusiasm of various school district employees and community members were important assets to the career education program according to both community representatives and school district personnel. They also thought that the administration and staff had displayed positive attitudes and strong leadership for the program. School district personnel also commended the support of the board of education and the effective coordination of career education activities at all grade levels. Both students and school employees cited the good staff-to-student relationship and community representatives agreed with students that the career education staff was excellent.

Several activities and techniques were particularly successful. Members of all three respondent groups were especially impressed with the effectiveness of the hands-on activities, for example, paid and unpaid work experience and site visits, and they also praised the Career Center, counseling and vocational guidance, and the resource people and resource outlets. School district personnel liked the fact that there were individual career modules for many career clusters. Feedback on the program by students and teachers was also helpful according to both district staff and community members. The career education curriculum was praised by the community, as was the practice of exploratory experience, from which both students and teachers learned new facets about careers. Students strongly commended the usefulness of career education films and classroom discussions, and they also enjoyed the simulation activities and ability games and tests.

All three groups said that an important outcome of the career education program was that students gained awareness of the requirements and availability of various career options. School district personnel, along with some community representatives, noted that the activities improved students self-awareness, taught them social dynamics, and improved their ability to conceptualize. The flexibility of the program aided students in meeting their academic and time needs according to some school employees. Community representatives felt that students were more likely to remain in school because of interest created by the program; they also supported the fact that students were learning about the relation of their classroom experiences to the world of work. Many students pointed out that career education was helping them to set tentative career goals.

What are the weaknesses and problems in the program? What changes would you like made in the program?

One of the problems cited most frequently by both groups of respondents was the lack of funds. Were more funds to become available, school district personnel and community representatives would like them to be used to increase the amount of staff development, the number of volunteers and counselors' aides, and the transportation of students to resource outlets. School personnel also wanted to see a larger Career Center, more classroom time spent on career education, and more materials and equipment made available for the Career Center. The last point was supported by the students. Some community members and students also thought that materials ought to be updated, the number of teachers and counselors increased, and the career education generally expanded.

According to each of the three groups certain activities needed to be improved or increased. School personnel respondents wanted an increase in the number of hands-on activities available as well as improved job placement techniques, perhaps by utilization of a computer. Community representatives said that there should be more resource outlets and resource people, but according to students there was some resistance to student work experience by the business community, because it was feared that students were competing with the adult work force.

There was a strong feeling expressed by all three groups that the program suffered from poor communication and coordination. This resulted in a lack of interest and commitment on the part of students, parents, and the community. According to school personnel and community members, teachers and counselors did not have a complete understanding of career education concepts, demonstrated, for instance, by the fact that counselors were still focusing on college-bound students and tracking students into "traditional" jobs. Students and community representatives thought that this situation could be improved through better publicity about career education, especially concerning differences between vocational education and career education.

Do you know of any community-based career education activities?

The YWCA program was cited by the community, while school personnel mentioned the Chamber of Commerce and the Boy Scouts.

Special Sample District #11

Demographic Data

The district has about 175 schools and 3 career development centers, with a total enrollment of over 140,000. Approximately 45% of the students are black and 41% are white. Students with Spanish surnames comprise about 13%, with native American and oriental students completing the total.

The district serves a large city with a population of over one million and an approximate median income of $10,500.

Summary of Career Education Activities in the District

The board of education first adopted a formal written policy on career education in 1973, which included provision for an advisory committee composed of teachers, counselors, administrators, parents, and students, as well as representatives from local business, community service organizations, and local government. The career education staff was supported by both State and local funds, and the program was evaluated by the district's research and development department. Teachers, counselors, and administrators participated at all grade levels in the implementation of career education activities, although involvement in inservice development was somewhat limited in 1974-75.

The district uses the full range of instructional techniques from basic curriculum materials to guest speakers, on-the-job experience, and even computer-assisted instruction. The district has implemented a wide variety of educational practices, including awarding credit on the basis of student performance evaluation and outside work experience, creating an open-entry/open-exit system, and de-emphasizing the tracking of students into clearly differentiated curricula. In addition to making courses available year-round and operating an adult education program, the district has also made special efforts for the career education of its gifted, physically or mentally handicapped, ethnic minority, and women students.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved at all stages of the program, from curriculum planning and initial implementation through later development, supervision, and evaluation. Community representatives were also highly involved, in such capacities as advisors and counselors, board members, adult education instructors, parents, and employers of students.

What are the strengths of the program, and why do you think it is a success?

The area most often cited by both school personnel and community members as contributing to the strength of the program was the enthusiastic support of those involved: teachers, administrators, resource people, and members of business and community service groups. Also mentioned by both school personnel and community members was the availability of good materials and equipment.

Certain methods of program implementation were listed by both respondent groups as important, including a well-designed curriculum tied to student feedback evaluations and the centering of the program around the needs of the student and the community. They also supported the use of the Career Center. In addition, counselors' vocational and employment backgrounds were felt, by school district personnel, to have improved their capabilities.

Both school district personnel and community members thought the program enabled students to get exposure to and, if desired, training in almost any field, as well as providing skills that were immediately marketable upon graduation. Community respondents also felt that the way academic subjects were tied to student work experience and to the world of work in general was an important strength of the career education program.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Despite the strengths and successes given above, the matter of limited funding was cited by several respondents as hindering the program's development. School district personnel wanted more funds to effect total implementation and to complete expansion of the program to all the schools. Some of them also said there was a lack of resources and materials and a need for more curriculum modules. Community representatives said there were not enough staff members and that their preparation was inadequate; additionally, they wanted more student follow-ups and increased program evaluation in general. Both school and community respondents stressed the need for more time for staff development.

Improvements sought in the area of activities were mentioned primarily by members of the community. They expressed the need for more hands-on activities in general and, specifically, more time allowed for shop activities. Others from that group felt greater emphasis should be placed on basic skills development and the "human skills" (skills related to interaction with other people).

Both school personnel and community representatives said that poor coordination resulted in some students being missed by the program; the needs of the native American students were mentioned specifically in this regard. Community representatives had several suggestions for changes, including infusion of career education into the regular curriculum, requiring students to take both vocational and academic courses (with a resulting de-emphasis on the academics-only orientation), and improving coordination with local business and industry. In this same vein, one community representative claimed poor coordination resulted in offering training for nonexistent jobs. A school district respondent sought increased involvement by colleges and universities in career education concepts in general.

Another broad area of weakness was the understanding of the concepts underlying career education, specifically that some teachers and community people did not understand the premises of career education, were often confused about the differences between career education and vocational education, and thus were neither accepting nor supporting the program in the schools. This view was stated repeatedly by respondents in both groups. The need was expressed, too, for greater uniformity of definition and increased exposure of the concepts to the staff and community.

Do you know of any community-based career education activities?

School employees named the Chamber of Commerce and 4-H clubs. Several community people mentioned the local college system. They also listed EOC, Urban League, OIC, HRD, a local engineering organization for minorities, and the city's Community Action Association.

Special Sample District #12

Demographic Data

The district has over 140 schools with an enrollment of more than 95,000. Black students comprise 87% of the district rolls, with most of the remainder listed as white. There are also a small number of oriental and Spanish-surname students.

The city served by the district has a population of over 500,000. Most families in the area have an income of less than $15,000, with the largest group in the $5,000 to $10,000 bracket. About 23% are not regularly employed.

Summary of Career Education Activities in the District

The district has taken many steps toward implementing career education, with the greatest emphasis on students in middle schools. About half of the teachers in the elementary and middle schools have participated in career education staff development activities, while only 15% of high school teachers have participated. Guidance personnel are involved in career education in the middle and high schools. Career education techniques cover the spectrum from the valuing approach in the elementary grades to vocational education activities and systematic guidance in the higher grades.

The individuals responsible for providing career education experiences are the vocational education staff, guidance counselors, teachers, and coordinators, assisted by representatives from business, labor, and industry. Funds for career education are included within the vocational education budget. No local, Federal, or State funds are allocated specifically for career education. In 1973 the board of education adopted a formal policy with regard to career education, and the program has undergone evaluation by a school district team. The district's advisory committee includes teachers, counselors, and administrators.

The district has incorporated a variety of educational practices into its system, including offering credit based on student performance evaluation and outside learning experience, elimination of tracking students into clearly differentiated curricula, and an open-entry/open-exit program, allowing students to attend school according to their individual needs. In addition, the district offers a regular adult education program and special career education courses for women, ethnic minorities, and the physically handicapped.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved in all phases of the program's implementation, including development, supervision, and coordination and then served as resource people. Community members participated individually as school board members, parents, and resource people. Additionally, they made contributions through employment agencies, youth groups, handicapped rehabilitation organizations, and the business education department in the high school.

What are the strengths of the program, and why do you think it is a success?

A major strength cited by school district employees was the support given by resource people, parents, and the community in general, and staff members received strong praise from both the community and school district personnel, particularly for their cooperation with one another.

The program's flexible nature and the recognition of the need for career education by students, staff, and the general community were mentioned by the community members as reasons for its success. They also thought that the close cooperation between school staff and vocational rehabilitation workshop teachers was especially helpful.

The use of hands-on activities was praised by both interviewed groups; school district personnel also supported the use of field trips, and community members supported the use of on-the-job experience. A favorable impact was predicted by the school personnel for the graduation requirement of 30 credits in career education, which will be implemented after June 1977.

A major strength cited repeatedly by both groups was that the program made students aware of a wide variety of career options, and the pros and cons of each, and also that it caused them to consider more thoroughly their long-range goals. They also cited its value in offering realistic, practical experiences, and the fact that each graduate left with at least one marketable skill.

What are the weaknesses and problems in the program? What changes would you like made in the program?

With regard to funding, some community members wanted additional money to further develop the program, but felt that, in reality, development might be hindered by anticipated budget changes. School district personnel concurred in the need for additional funds in order to develop the program to its full potential.

Some of the school employees interviewed wanted more hands-on activities, while others cited inadequacies in the district schools that did not have both basic skills and vocational training; opinions from the community stressed the need for even more training in marketable trade skills. In terms of staff activities, the community people saw a need to reduce teacher loads to facilitate increased individual counseling attention to students, and they wanted greater efforts by counselors to direct students into needed fields. Another area of concern to these respondents was that minority students were not getting equal exposure to career options and appropriate training. School district people had had difficulty obtaining needed career education materials, and they wanted counselors to have a broader experience with vocational education and outside work in general.

Improvements relative to program communications and coordination efforts were needed, according to both respondent groups; they wanted increased cooperation between community employers and the schools. Community members also thought increased parental and business involvement in program planning and implementation and a uniform procedure for helping special education students would improve the quality of the program. School staff expressed a similar concern, the need for increased program consistency.

Both respondent groups thought program weaknesses existed because of lack of understanding regarding career education concepts and goals; in particular, they felt that too much emphasis was being placed on an academic orientation by staff, parents, and the public in general. Several community people said that special education and vocational rehabilitation programs had suffered for lack of understanding by school personnel and the public. One school district respondent said that some employers were not receptive to career education in general or to the hands-on component in particular.

Do you know of any community-based career education activities?

One community representative mentioned the Urban League.

Special Sample District #13

Demographic Data

The district has over 20 schools and a career center, with a total enrollment of about 14,000. An additional 1,000 students from neighboring districts pay transfer tuition to attend half-day sessions at the career center. The majority of the students are white, with blacks comprising about 2,000 of the district's enrollment. There are small numbers of Spanish-surname, oriental, and native American students.

The district serves a community with a population of under 50,000. The approximate median income is $9,000.

Summary of Career Education Activities in the District

Approximately 70% of the district's elementary school teachers took a career education course for graduate credit and participated in staff development workshops, as opposed to 30% of the junior high and senior high teachers. Guidance personnel were involved at all levels, although they did not take a strong leadership role.

The career education staff consisted of three workers, two full-time and one part-time, supported by Federal funds allocated to the State. The district, which was a demonstration site, employed career education techniques such as a Career Center, which was a vocational training school, a mobile career awareness unit for the elementary grades, and a Community Service Project that offered students on-the-job experience in the social services. In addition, students were offered the use of a computerized vocational information service that listed information about jobs in the State. The program was evaluated by an independent contractor.

The practices championed by USOE that were incorporated into the school system include de-emphasizing the tracking of students into clearly differentiated curricula, offering an adult education program, and awarding credit for outside learning experiences. In addition, the school district made efforts to address the special career education needs of the mentally and physically handicapped.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

School district employees were aware of the program because their duties had included some specific involvement (e.g., career education development, exploratory experience excursions, guidance counseling). Community representatives were involved in a variety of ways--through attending school board or PTA meetings, through serving as resource persons, or because of their children's exposure to career education.

What are the strengths of the program, and why do you think it is a success?

Community representatives and school district personnel said that there was strong student and teacher interest in the program because it was a voluntary program, and they also mentioned the high interest of the business community. School personnel praised the leadership of the career education coordinator, and went on to commend the administration and the board of trustees for their strong support of the program. Community representatives said that parental enthusiasm was a significant program strength.

Both groups said the infusion of career education into the regular curriculum was an important factor in the success of the program. Some of the effective career education techniques and facilities were the multimedia mobile unit, the Career Center, and the use of resource people as guest speakers. School personnel said that the elementary level self-concepts program and the junior high school reading program had provided new perspectives on careers. In addition, career education appeared to help teachers and counselors recognize that not everyone was headed for college, and therefore the needs of both college-bound and non-college-bound students were met more effectively. Community representatives named hands-on activities and the use of multi-media materials as the most effective techniques, while students supported the positive effect of the program's continuity from grades K-12.

Both school district personnel and community representatives said that the program has exposed students to a wider range of career options and had improved their decision-making skills. School personnel also said that career education improved students' awareness of community needs and increased their personal confidence. Community representatives said that students were graduating with a better concept of how their education was related to the world of work and that they were actually less likely to drop out because school was meeting their needs. Once they did graduate, they were able to secure jobs they might not have been able to get before the advent of career education.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Both school personnel and community representatives stated that the lack of funds had had a variety of negative effects on the program. School personnel felt that more money was needed to provide for additional released time for inservice training, for improved career education materials, for expanded facilities, for more career education activities, and for transportation for students to the Career Center. Community representatives also sought additional inservice training for teachers and, in addition, wanted funds made available to hire more counselors.

Both groups said that minorities were underrepresented in staffing and as resource people. The needs of minority students were not met effectively, since they had fewer role models and, therefore, had a narrower range of career options from which to choose. Students said that not enough emphasis was placed on careers for women, except the more traditional ones, such as nurse or secretary. Community representatives pointed out that there needed to be a greater focus on "special" students (such as the physically handicapped) and not just on "normal" students. Some school personnel said that career education was not sufficiently integrated into the regular curriculum, nor had it been expanded to its fullest potential. Both groups said the program should include more thorough follow-up procedures of students in order to determine how well the needs of the students were being met.

Both community representatives and school district personnel were concerned with the high staff turnover and with the difficulty in finding qualified and dedicated teachers who were receptive to the infusion of career education into classroom activities. School personnel said that the program needed better coordination and direction and that the teaching of career education concepts was inconsistent through the different grade levels. Also mentioned was a lack of understanding on the part of students, many of whom considered career education to be vocational education and refused to take advantage of the career education facilities for that reason. Community representatives felt that there was a general lack of understanding and support by many parents, citizens, teachers, and administrators, but that publicity and promotion of the career education concepts might alleviate that problem.

Do you know of any community-based career education activities?

Both groups mentioned the Chamber of Commerce, the YMCA, and the National Alliance of Businessmen (NAB).

Special Sample District #14

Demographic Data

The district has about 20 schools, including two vocational high schools that also serve students from other districts. Total enrollment is over 12,000, almost totally white.

The district serves a city of over 85,000 people, located about 10 miles from a larger metropolitan area. The median income is approximately $14,000.

Summary of Career Education Activities in the District

The career education staff consisted of one full-time and one part-time worker, supported in 1974-75 by State funds and in 1975-76 by the local school budget. The topic of career education was dealt with by the district's advisory committee for vocational education.

Only a few teachers participated in career education staff development activities; however, a majority of the junior high guidance counselors did participate in such activities, and guidance personnel were involved in career education at all grade levels. Career education activities in the elementary schools were integrated with the traditional subjects. Other career education techniques included the use of guest speakers from the business community. The schools in the district offered credits on the basis of outside learning and work experiences as well as a complete adult education program.

Questions and Summary Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were made aware of the program through direct involvement with materials and staff development and through teaching career education classes. Community representatives were made aware through their participation on the school board, at PTA meetings, serving as resource people, and working with a regional resource agency that conducted assessments and reviewed program goals and objectives.

What are the strengths of the program, and why do you think it is a success?

School district personnel commended the support and involvement of the superintendent, parents, community members, and students. Both school personnel and community representatives were especially impressed with the dedication and enthusiasm of the teachers.

School personnel and community members thought that the integration of career education concepts into the regular curriculum was an important aspect of the success of the program in the district. Career education was described as a new and practical approach to education that facilitated the teaching of basic skills. School personnel said that the inservice training that teachers received was effective and that teachers were able to design their own programs and curriculum. According to community members, career education has fostered better communication between the school and the community.

Both community representatives and school district personnel said that the new career education concepts were exciting to students. School personnel cited the value of student exposure to a variety of career options and hands-on activities, and also noted students' increased ability with decision-making skills.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Insufficient funding was generally agreed to be a major barrier to the development of career education. Cutbacks in State funding two years earlier had caused a slowdown in development; the district was unable to upgrade and update career education materials, facilities, and activities or to improve counseling techniques. Also, school personnel thought that teachers needed more released time to develop career education activities.

School personnel said that non-academically oriented students were being tracked into career education, which was unfair to these students. They also thought that certain career education activities ought to be increased such as onsite work observation, hands-on activities, and the use of resource people.

According to school personnel there were some problems with coordination of teachers' efforts; teachers were using different approaches and were sometimes duplicating each other's efforts. Two suggestions were made for improving this situation: more inservice training for teachers and the hiring of a full-time career education coordinator. Both school district and community respondents thought that the lack of administrative support was a significant problem. In addition, some school personnel felt that the community could be more supportive.

It was generally agreed that misunderstanding of the career education concepts was preventing many people--school staff, parents, and the public in general--from giving wholehearted support to the program. Community members specifically cited the lack of publicity about career education as a factor contributing to this problem.

Do you know of any community-based career education activities?

School district personnel mentioned the Explorer Scouts program.

Special Sample District #15

Demographic Data

The district has between 15 and 20 schools, with a total enrollment of nearly 20,000. Approximately two-thirds of the students are white and about one-fifth have Spanish surnames; the remaining student population is comprised of blacks, orientals, and native Americans.

The city served by the district has a population of over 60,000, with an approximate median income of $10,000.

Summary of Career Education Activities in the District

The career education staff consisted of nine full-time workers, including four career information specialists, supported by local and Federal funds. The board of education strongly supported the program, which had been evaluated through the use of follow-up studies of graduates who had participated in career education programs. The school district's advisory committee for career education included teachers, counselors, administrators, work experience personnel, students, and parents; also for every vocational education program in the district there was an advisory committee made up of individuals representing business, industry, labor, agriculture, and the professions. About half of the district's teachers had participated in career education staff development activities.

Career education techniques included the use of Career Information Centers, guest speakers from the business community, and on-the-job work experience for credit. District policies included offering credit toward graduation on the basis of student performance evaluation and for learning and work experiences outside the school. In addition, the district supported an adult education program and made special efforts to address the career education needs of educationally and physically handicapped students, providing them with a full-time work experience advisor.

Questions and Summary Responses

How did you learn about the program, and in what ways have you been involved?

School district personnel were involved as teachers, counselors, and administrators and in the development and coordination of the program's activities. A number of community people were involved as resource persons and provided hands-on activities for students. Others became aware of the program as representatives from local agencies such as the PTA and the Chamber of Commerce.

What are the strengths of the program, and why do you think it is a success?

Both the school district personnel and the community representatives thought the support and enthusiasm of teachers, administrators, the school board, and the community to be an important asset to the career education program. The gap between the business community and students was being narrowed through an improved working relationship between the schools and business/industry. Community representatives also expressed the opinion that the program was working because district personnel were highly qualified to teach career education.

Both groups were particularly impressed with the accomplishments and leadership of the career education coordinator. They also said that the Career Center and the use of qualified resource people were important factors in the program's success. Some school district personnel felt that the program had benefited from the availability of effective materials and supplies and adequate funding. Community representatives supported the career education workshops and also the hands-on activities, which had been helpful in enabling students to graduate with marketable skills. They also praised the district for having implemented the program at all grade levels.

Students' interest in their own education was stimulated by the career education program, according to both school personnel and community members. The students were able to see the relevance of courses to the world of work, and they had expanded their awareness of career options. Community members pointed out that graduating students were more likely to be hired immediately after high school, both because they were more proficient at job-getting skills (e.g., preparing resumes) and because they had been exposed to a wider variety of careers requiring only a high school diploma.

What are the weaknesses and problems in the program? What changes would you like made in the program?

The problem cited most often was the cutting off of Federal funding shortly after the program was initiated. School district personnel wanted an increase in Federal funds, to be spent on such things as teacher in-service training, released time, and expanded facilities. Community members were interested in the hiring of more staff who were qualified to teach career education.

Community members also had several suggestions for improvement of the career education program that did not require additional funding. They felt that greater use could be made of the available facilities and staff. One problem was that career education was not relating school to the world of work as much as it might. They also said that counselors should spend less time on non-counseling duties and become more closely involved with students in the career decision-making process. Stereotypes about certain jobs being available to only one sex were apparently still being perpetuated. Some community members wanted the introduction of additional hands-on activities at an earlier stage in the program, and a suggestion was made that career education could become partially self-supporting if a program for student production and sales were started. Return to the use of the Carnegie unit for student evaluation was also suggested.

Some problems arose from the lack of commitment to or understanding of career education concepts. Both groups said that many teachers, counselors, and administrators were confused about career education concepts and resistant to their implementation. Community members felt that many of their peers were unaware of the benefits of the career education program, because of a lack of emphasis by school district personnel on community participation. They also cited poor communication and coordination between the high schools and junior colleges, between counselors and career education staff, and between career education staff and the ROP program.

Do you know of any community-based career education activities?

School district people mentioned the Boy Scout exploratory program. Community individuals listed the Work Training Program, Inc., an aviation committee, the county office program, the CEDAR program, and a local high school.

Special Sample District #16

Demographic Data

The district, serving several small cities, has over 20 schools with a total enrollment of over 12,000. Approximately 85% of the students are white, and more than 10% have Spanish surnames. There are also smaller numbers of oriental, black and native American students.

Summary of Career Education Activities in the District

The district was first involved with career education as a pilot district chosen to demonstrate components of a statewide Career Education Project. The district concentrated its preliminary efforts on designing and providing career development activities for junior and senior high school students. A grant from the U.S. Office of Education was provided to support these demonstration efforts beginning in 1972. With additional Federal support, elementary school and community college components were added to provide a comprehensive program.

Some of the career education techniques utilized were self-understanding kits in the elementary grades, Career Centers and Searches, and guest speakers from the business community. Students also received credit for their participation in an on-the-job work experience program conducted by the district. In addition, the district maintained an adult education career center that provided counseling and guidance services to the entire community. A career education information survey was employed to determine how well project objectives were being attained. Performance objectives relating to career development were infused into all curriculum areas at the junior and senior high school levels. A teacher task force was organized to develop job performance planning guidelines, encouraging other faculty to include one or more objectives relating to career development in their curriculum areas. As a result, about half of the district's upper grade teachers included career-relevant objectives in their curriculum plans.

Questions and Summary of Responses

How did you learn about the program, and in what ways have you been involved?

Almost all of the school personnel participated in the development and implementation stages of the program, including curriculum planning and materials selection. They were also involved as resource people, counselors, teachers, coordinators, and task force members.

Community representatives became aware of the program as parents, school board members, business persons seeking employees, and as resource people. Others assisted with career education activities, provided materials to the schools, or wrote career information books for the city.

Several of the students were made aware of the program in classes in which career education was infused into the regular curriculum. Others served as aides in the Career Center.

What are the strengths of the program, and why do you think it is a success?

School district personnel, community representatives, and students all reported that the support and commitment of various groups contributed significantly to the program's success. School personnel stressed the importance of the support given by teachers, principals, administrators, students, and parents. They said that the abilities of the counselors, the career education task force, and the coordinator added significantly to the program. Community representatives were especially impressed with the commitment of teachers and students, and students praised the efforts of the coordinator.

Some of the activities and techniques used in the program were noted to be very effective: School district personnel said that the use of the Kuder Interest Inventory to determine the interests of students had been successful. Field trips were praised for facilitating students' personal contact with workers, and the career education materials were described by some as being quite good. Community representatives agreed with school employees that the Career Center was of special importance in the program's overall success, and they were especially supportive of the hands-on activities. Students said that they enjoyed the career education films and thought they were worthwhile.

Students received many benefits from the implementation of career education, and respondents from all three groups agreed that their exposure to new and unfamiliar career options was of primary importance. Both community representatives and school personnel thought that students were interested in this new approach and that career education was actually preventing some of them from dropping out of school. Career education promoted a good self-image and taught relevant skills such as decision-making, as well as clarifying for students the relationship between their education and the world of work. School personnel noted that students were still being taught basic skills, but were now learning how to apply them to their career development. Students were happy with the fact that they were receiving early exposure to the kinds of preparation necessary for different careers. They also learned about college and college requirements, and the required high school courses relating to different career paths.

What are the weaknesses and problems in the program? What changes would you like made in the program?

Several problems relating to funding were mentioned by the three respondent groups. School personnel called for more released time and inservice training for teachers and for increased classroom space, especially for the Career Center. Community representatives said that more staff were needed to increase the amount of individualized contact with students. They also felt that money was needed to buy materials for, and increase the career education instruction given to, handicapped students. Improved transportation for all students was needed, too. One student said that there should be a Career Center at each school, and several said that there should be more materials at the Career Center so that it could accommodate more students.

School district personnel said that there should be more hands-on activities, better infusion of career education into the regular curriculum, more up-to-date materials, and more time available for career education, both in the classroom and at the Career Center. There were complaints that teachers were "dumping" students at the Career Center, and it was suggested that teachers should stay with the students to help them make the best use of the facilities. Some felt that career education should be made a required subject. The need for a more logical progression of the career ededucation curriculum through grade levels was also mentioned. Another suggestion was that student follow-ups be utilized to assess the program's overall effectiveness in meeting their needs. Community representatives said that the program should be expanded to serve the needs of more students. They also said, as did the students, that there should be more resource people coming to the schools to give presentations. Students themselves wanted several changes, including earlier exposure to career education, more measures of their interests and aptitudes, less bias toward science careers, and more time at the Career Center. They also mentioned the need for more and better materials.

School personnel felt that poor communication and public relations were partially responsible for the lack of community and parental involvement. They thought that the administration should demonstrate more concrete, perhaps written, support of the program, thus producing greater teacher acceptance and commitment to the teaching of career education. School personnel said that coordination of the program was also a problem. There was a lack of communication between the ROP and work experience programs, as well as between career education supervisors in the district. Community representatives mentioned poor communication, which had led people to believe career education was for low achievers only. They felt that there should be a closer relationship between the schools and the business community. A problem noted by all three groups was that some students were not taking the program seriously (perhaps feeling it was for low achievers), and they were going to the Career Center just to "goof off." It was felt that unless the concept was embraced by all staff members, it was not likely that students' attitudes would change.

Do you know of any community-based career education activities?

School district personnel mentioned the Explorer Police Cadet program, a city work experience program, and the County Sheriff's Department. Community people also noted the police program.